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ABSTRACT

This paper reviews and summarizes the current and projected status of education and employment, and their relatedness, for working women, and suggests avenues for improvement. It examines women's increasing role in the labor force and the social, economic, and demographic trends and projections relevant to that role. In evaluating the impact on women of existing programs of worker education and training, the paper assesses federal, local, private, and union offerings for working women. After this delineation of the female workforce, its educational opportunities, and the spurs and barriers to use of those opportunities, consideration is given to policy implications for government, private sector, and educational institutions. The focus of the paper provides a rationale for a special focus on working women's educational opportunities. Its context is that when women are not specifically targeted by a program, they are underserved by it; artificial barriers stemming from sex-role stereotypes render unequal their opportunity to benefit from the program. Thus, while all workers can profit from greater consideration of their educational needs, it is the aim of this paper to help program designers understand the specific needs of women, so that predictable obstacles faced by female workers may be addressed preventively rather than remedially. (KC)

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Worker Education and Training Policies Project and National Commission on Working Women

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Issues in Education and Training for Working Women

Denise Wilder

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The authors of the policy research papers in this series are knowledgeable analysts both from within and without the National Institute for Work and Learning. Their charge was to explore one or more issue areas which the project identified as being of significant interest to public and private sector decision makers concerned with shaping worker education and training policy and practice for the coming decade. Authors were asked to synthesize the relevant research bearing on the issue areas, to assess the knowledge base with a view to discerning the points of public and private policy relevance, and to use their best independent professional judgements in offering recommendations for action.

Therefore, it is important to note that the opinions and points of view presented in this and other papers in this series do not necessarily represent the official positions or policy of either the National Institute of Education or of the National Institute for Work and Learning.

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PREFACE

Women today comprise almost 43% of the U.S. workforce. They are responsible for a large portion of our national economy, as well as their own family incomes. Though women now work an average of 26 years of their lives, they are still thought of by many as temporary or secondary workers. Over the years, this traditional view of women has created a situation in which female workers are heavily concentrated in a very limited number of lower-paying, dead-end "women's" jobs. Because of this occupational segregation, wage gaps have widened, job status and working conditions have deteriorated, and opportunities for job mobility through education and training have stagnated. In short, while the general image of women workers is still based on old assumptions about their role in society, the realities of modern day living have changed their needs and aspirations. That 80% of women workers who are clustered at the bottom of the pay-scale in clerical, service, sales, factory and plant jobs must no longer be undervalued and underappreciated. The time has come to catch up with reality.

The following monograph on "Issues in Education and Training for Working Women" represents a large step in the right direction. By bringing together and clearly stating the facts concerning women workers and education, Denise Wilder has pinpointed the areas in which work is urgently needed. For the unconvinced, her arguments for targeting certain programs specifically for women, and linking those programs with data on the prevailing occupational outlook are most persuasive. Moreover, the need to legitimize informal learning modes and encourage collaborative efforts in matching education/training with local jobs becomes clearer than ever through Wilder's work. In brief, this monograph brings into sharp focus not only the current state of the art, but also some important next steps.

Those of us who work in the vineyards of educational equity for the pink and blue collar women of "The 80%" are grateful to the Worker Education and Training Policies Project for making this monograph available. We intend to use it as a tool for burying the old assumptions and embracing the new realities.

Elizabeth Duncan Koontz
Chair
National Commission on
Working Women

FOREWORD

With the publication of this monograph, Denise Wilder provides us with the first serious look at issues in education and training for working women. The monograph begins by reviewing current and projected data on working women and then focuses attention on their education and training opportunities. Readers will also find Wilder's review of legislation on this issue particularly useful.

The inescapable conclusion of this monograph is that women who are stuck in female-intensive occupations do not have access to training and education programs. These occupations are characterized by low-pay, low-status, and a lack of mobility. The women who occupy these positions make up 80% of all the women who work today. Thus, anyone concerned about providing equal access to jobs should pay particular attention to the education and training needs of these women.

In the absence of comprehensive public policies that deal with the special education and training needs of working women, we have addressed problems in this area on an ad-hoc basis. During the past two years, the National Institute of Education through its support of the National Commission on Working Women, has begun to identify the education and training needs of the "80%" and has encouraged local communities to address this issue as well. The next task is to formulate policies to dismantle the education and learning barriers these women have identified. Whether it is the creation of child-care facilities, paid time-off the job, or the integration of education and training with job mobility, public policies designed to enhance the opportunities of low-status working women will require a serious commitment from all levels of government, industry, and labor, as well as from the women themselves.

If public policy is to be effective, it must be founded on an understanding of the people it effects. Therefore, as we move toward the formulation of public policies in the area of education and training for working women, we should never lose touch with the women themselves. Only then will our public policies serve the needs and goals that working women have set for themselves.

Nevzer Stacey
Program Officer
National Institute of Education

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INTRODUCTION

Within the past decade, a renewed emphasis has been given to links between work and education, and, in that context, some of the attention has focused on worker education. As women have become a considerably greater portion of the workforce, yet not evenly distributed throughout it, some researchers and officials have begun to realize that education and training, and their relationship to work, are different for women and men.

The purpose of this paper is to review and summarize the current and projected status of education and employment, and their relatedness, for working women and to suggest avenues for improvement. The following sections will examine women's increasing role in the labor force and the social, economic, and demographic trends and projections relevant to that role. In evaluating the impact on women of existing programs of worker education and training, we will assess federal, local, private, and union offerings for working women. After this delineation of the female workforce, its educational opportunities, and the spurs and barriers to utilization of those opportunities, consideration will be given to policy implications for government, private sector, and educational institutions.

The facts and figures contained in these pages provide a rationale for a special focus on working women's educational opportunities. At a time when people at all income levels believe that an economic crunch is moving important goals beyond their reach, and when affirmative action efforts are balanced precariously against backlash cries of reverse

discrimination, some may feel that no single group merits special attention. Certainly, any path to improved quality of life, or standard of living, should be equally accessible to all who desire to tred it, with no artificial barriers erected. That is precisely the context for this paper: namely, that when women are not specifically targeted by a program, they are underserved by it; artificial barriers stemming from sex-role stereotypes render unequal their opportunity to benefit from the program. Thus, while all workers can profit from greater consideration of their educational needs, it is the aim of this paper to help program designers understand the specific needs of women, so that predictable obstacles faced by female workers may be addressed preventively rather than remedially.

I. WHO ARE WOMEN WORKERS?

In the past quarter-century women have poured into the workforce at unprecendented rates, accounting for three-fifths of the civilian labor force growth in the last decade* and creating what may well be the single greatest social change in this century. The number of women holding paid jobs has grown from 18 million in 1950 to 43.2 million in March 1979--an increase of 140%, while the overall workforce has grown by 62% in that time span.[1] The most liberal projections by the Bureau of Labor Statistics, which to date have erred consistently on the low side, suggest that 49.4 million women will be employed outside the home in 1990. Current figures indicate that 90% of women will work for some part of their lives. Typically, public awareness of a shift lags behind its behavioral manifestation, and so one frequently hears the question: "Who are these working women?" The Bureau of Labor Statistics has compiled a great deal of information on women in the workforce which helps to inform the following overview.

Age

Labor force participation is significant among all age groups of women over eighteen; however, there is variation among age groups. The annual average participation rate for all women over 16 was 50% for 1978. In July 1978, 69% of women between 20 and 24, and 62% of women between 24 and 34, held or sought jobs. (In 1960, the respective

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*All statistics contained in this section were obtained from the Bureau of Labor Statistics, U.S. Dept. of Labor, unless otherwise noted.

percentages were 46% and 36%.) The only age group over 18 in which fewer than half of the women work for pay is the 55-and-over group, in which 41% of women 55-64 and 8.5% of women over 65 are in the workforce.

Marital and Parental Status

Of the 43 million working women in this country, 25% are single, 56% are married, 4% are separated, 5.5% are widowed, and 9.5% are divorced.

Married women, particularly those with children under 17, have experienced the most dramatic jump in labor force participation. Whereas in 1940 married women with husbands present comprised 30% of the female workforce, in 1978 they constituted 56% of all working women. (From 1950 to 1976 the proportion of married women in the female population dropped from 65% to 59%.) Among these women, about 45% of those with no minor children worked, while over 57% of those with a youngest child between 6 and 17 years of age, 48% whose youngest is between 3 and 5, and 38% with infants under age 3 were employed in 1978. Among married mothers with absent husbands, the percentages are significantly higher, as shown in Table 1.1, and the highest participation rates occurred among divorced mothers (with the exception of those whose youngest child is preschool-age).

Fourteen percent of American families are headed by women. Women head 34% of minority families and 11% of white families. Forty-six percent of all children under 18 have mothers in the labor force, and nearly half of those children are in families where the father is absent, unemployed, or not in the labor force. Approximately 6 million preschoolers have working mothers.

TABLE 1.1

PERCENTAGES OF WORKING WOMEN, BY MARITAL STATUS AND AGE OF YOUNGEST CHILD (MARCH 1978)

Marital Status	Total	No children under 18 years	Age of Youngest Child		
			Children 6 to 17 years, none younger	Children 3 to 5 years	Children under 3 years
Women, 16 years and over, total	49.1%	47.0%	60.0%	50.4%	39.1%
Never married, total	60.5	61.1	69.9	50.1	35.6
Married, husband present	47.6	44.7	57.2	47.9	37.6
Married, husband absent	56.8	54.7	61.8	59.4	51.2
Widowed, total	22.4	20.0	56.7	1/	1/
Divorced, total	74.0	71.2	81.4	58.5	64.6

1/ Rate not shown where base is less than 75,000.

SOURCE: U.S. Bureau of Labor Statistics. News. (Press release USDA 78-638) July 24, 1978. Marital and family characteristics of the labor force, March 1978. Washington, 1978. Table 5.

Race

Labor force participation rates for minority women have risen only slightly in recent years, as opposed to the tremendous increase among white women. Still, minority women as a group have higher participation rates than do white women. Of the female population over 16, an annual average of 53.1% of black women and 46.5% of hispanic women were workers in 1978. White women fall between these two groups with an annual average participation rate of 49.5%.

Educational Attainment

The median level of education for working women is 12.5 years, as it is for working men. Approximately 70% of working women have at least completed high school. (Age is a factor here: 85% of female workers age 20-34 are high school graduates; this is true of only 68% of employed women over 35.) More than 25% have completed at least one year of college, while 12% are college graduates.

Education is directly correlated with workforce participation. As Table 1.2 shows, only 20% of women with less than 8 years of schooling were working or seeking work in March 1975, whereas over 70% of women having 5 or more years of college were workers.

While women workers have attained similar levels of education to their male counterparts, the differences in what they have studied are striking. Among students enrolled in 1978 secondary, postsecondary, and adult vocational education programs, the disparity is most evident in the areas of Office Occupations, Consumer and Homemaking, and Trade and Industry. As Table 1.3 portrays, over 70% of the women (just under 24% of the men) were in clerical or homemaking fields, while 45% of the men (less than 7% of the women) were training

TABLE 1.2

PERCENTAGES OF WOMEN IN THE WORKFORCE,
BY EDUCATIONAL ATTAINMENT

Level of Education	Percentage of Women in Workforce
Less than 8 years	21%
Eight years	27%
High school - 4 years	53%
College - 4 years	61%
College - 5 or more years	71%

SOURCE: Women's Bureau, Employment Standards Administration, Women Workers Today (U.S. Department of Labor, 1976), p. 5.

TABLE 1.3

DISTRIBUTION OF MALE AND FEMALE VOCATIONAL STUDENTS ACROSS SELECTED PROGRAM AREAS

Program Year 1978

Program Areas	Number of Female Students	Percentage of Students	Number of Male Students	Percentage of Students
Agriculture	173,125	2.2	833,417	13.0
Distribution	495,435	6.4	466,574	7.3
Technical	92,872	1.2	434,809	6.8
Trade & Industry	524,019	6.8	2,878,703	45.1
Consumer & Homemaking	2,945,850	38.2	713,591	11.2
Health	591,111	7.7	167,697	2.6
Occupational Home Economics	459,590	4.9	80,888	1.3
Office Occupations	2,504,231	32.5	808,244	12.7
Total	7,705,345	99.9*	6,383,923	100.0

*Less than 100% due to rounding.

SOURCE: Office of Education. Summary Data--Vocational Education, Program Year 1978. Washington: USDHEW. Data derived from information on page 21.

for a trade. (These figures exclude a small percentage of vocational students enrolled in a category called "Special Programs.") Table 1.4 shows the breakdown by sex of enrollment in vocational areas for the 1976 and 1978 program years, again demonstrating male predominance in agricultural, trade, and technical fields, with females comprising the bulk of health, homemaking and clerical course enrollments.

The differential in college degree fields is also substantial: 40% of women (16% of men) earned degrees in education or letters and fine arts, while 32% of the men (7% of women) received bachelor's degrees in the fields of business and management or engineering (see Table 1.5).

Given this variance between men and women in occupational preparation, it is apparent that the differences in occupational distribution discussed below have their origins well before entry into the job market.

Occupations

Occupational category is the factor which most strikingly distinguishes male from female workers. Nearly 80% of women workers are concentrated in clerical, sales, service, factory, or plant jobs characterized by low pay, low occupational status, and little chance for advancement (see Table 1.6). Ten occupations account for 40% of female workers: secretary, retail sales, bookkeeper, household worker, teacher, waitress, typist, cashier, seamstress, and nurse.[2] Within all of these areas except retail sales, women comprise 80% of more of the workers. In contrast, less than 20% of male workers are concentrated in the ten largest occupations.[3]

Even within occupational categories, women tend to be segregated into less prestigious job titles--for example, while 16.1% of working women fall into the professional-technical category, 60% of these are nurses or elementary and secondary teachers, while men in this category

TABLE 1.4

COMPOSITION BY SEX OF SELECTED VOCATIONAL PROGRAM AREAS

Program Years 1976 and 1978

Program Areas	1976 Total Enrollment	1976 % Female	1976 % Male	1978 Total Enrollment	1978 % Female	1978 % Male
Agriculture	1,059,717	11.3	88.7	1,006,259	17.2	82.8
Distribution	900,604	40.8	59.2	962,009	51.5	48.5
Technical	484,807	11.3	88.7	527,681	17.6	82.4
Trade & Industry	3,109,950	12.7	87.3	3,402,722	15.4	84.6
Consumer & Homemaking	3,515,042	83.2	16.8	3,659,441	80.5	19.5
Health	684,904	78.7	21.3	758,808	77.9	22.1
Occupational Home Economics	471,289	84.7	15.3	459,590	82.4	17.6
Office Occupations	3,114,692	75.1	24.9	3,312,475	75.6	24.4

SOURCE: Office of Education. Summary Data--Vocational Education, Program Year 1978. Washington: USDHEW, p. 21.

TABLE 1.5

PERCENTAGE OF MEN AND WOMEN RECEIVING BACHELOR'S DEGREES, BY MAJOR FIELD OF STUDY, 1975-76

Field of Study	Men	Women
Education	8.3%	26.8%
Engineering	8.9%	0.3%
Business & Management	22.8%	6.7%
Health (non-M.D.)	2.3%	10.1%
Letters & Fine Arts	7.7%	13.0%
Biology & Physical Science	10.5%	5.4%
Psychology	4.5%	6.4%
Social Sciences	15.6%	11.4%
All Others	19.4%	19.9%

SOURCE: Congressional Research Service, Women in America: A Source Book, in The Coming Decade: American Women and Human Resources Policies and Programs (Washington, D.C.: U.S. Senate Committee on Labor and Human Resources, 1979), Chart 8, p. 1378.

TABLE 1.6

PERCENTAGES OF WOMEN WORKERS BY OCCUPATIONAL CATEGORY (MARCH 1978)

Occupational Category	Percentage of Working Women
Professional/Technical	16.1
Managerial/Administrative	6.3
Sales	6.8
Clerical	34.7
Craft	1.7
Operative	11.2
Non-Farm Laborer	1.6
Service, including Private Household	20.5
Farm Laborer	1.1

SOURCE: "An Overview of Women in the Workforce" (Washington, D.C.: National Commission on Working Women, 1978).

are more likely to be doctors, lawyers, or college professors.[4] Thus occupational segregation by sex is both horizontal (women are clustered in a few occupational categories) and vertical (within occupational areas, women are in lower-status jobs than are men). The third, and related, type of occupational segregation, income differential, is discussed below.

Income

During the same period of time as women's rapid influx into the workforce, their earnings, as a percentage of men's earnings, have decreased steadily. While in 1955 full-time women workers earned 64¢ for every dollar made by full-time male workers, this figure dropped to 61¢ in 1960, 59.4¢ in 1970, and 58.9¢ in 1977.

The median income for women working full-time, year-round in 1977 was $8,814, compared to men's median of $15,070. The data in Table 1.7 indicate that sex cuts deeper than race as an income factor, although race certainly makes a difference. While white women earned more than black or hispanic women*, all three groups of women earned a lower average income than men of any race.

Even within the same job category, women earn significantly less than men (see Table 1.8). Thus, horizontal segregation limits women to generally low-paying occupational fields, and within those fields vertical segregation holds them in the lower-status, lower-paying jobs.

The median annual earnings of a female high school graduate were $7,103 in 1977, compared to a male graduate's median of $12,260. Median

*Earnings data which have been adjusted for age, education, occupational prestige, duration and intensity of work experience, and local income norms indicate that black women have a slightly higher adjusted mean income than white women. Again, each group of women had lower earnings than any group of men. (Social Indicators of Equality for Women and Minorities. Washington: U.S. Commission on Civil Rights, 1978, p. 54.)

TABLE 1.7

MEDIAN ANNUAL INCOME OF FULL-TIME, YEAR-ROUND WORKERS IN 1977, BY SEX AND RACE

Population Group	Median Annual Income
White	
Men	$15,378
Women	8,870
Black	
Men	$10,602
Women	8,290
Hispanic	
Men	$10,935
Women	7,599

SOURCE: "Money Income in 1977 of Families and Persons in the United States," U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, "Consumer Income," No. 118, March 1979.

TABLE 1.8

MEDIAN WEEKLY EARNINGS OF FULL-TIME WAGE AND SALARY WORKERS, BY SEX AND OCCUPATIONAL CATEGORY (MAY 1976)

Occupational Category	Men	Women	Women's earnings as a percent of men's
Sales	$244	$111	45%
Clerical	228	147	64%
Service	170	109	64%
Construction	244	167	68%
Manufacturing	231	137	57%
Private Household	(not measurable)	66	--

SOURCE: "A Few Facts About Working Women," National Commission on Working Women, Washington, D.C., 1977.

earnings of female college graduates were $10,519 as against $17,129 for a man. Thus, the median annual earnings for a male high school graduate exceeded those of a female college graduate.

Two out of three persons living in poverty in the United States are women; the incidence of poverty among black and hispanic women is even higher than it is for white women. Fully one-third of the 7.7 million families headed by women were poor in 1976. More than 27% of black children live in female-headed families characterized by poverty.

Mobility

Women disproportionately hold jobs characterized by low cost and high availability--that is, jobs which require little investment in the way of education/training and which are plentiful in comparison to more skilled/prestigious jobs. These female-intensive jobs offer poor prospects for advancement. While women hold only 5% of jobs with high opportunity for advancement, they hold 64% of jobs offering few possibilities for upward occupational mobility.[5] Thus, not only are women more likely to be found in low-status, low-paying jobs, they are also likely to remain there.

Related to occupational mobility is earnings mobility, or the pattern of earnings over time. It is generally expected that additional income increments will accompany increasing age until a peak is reached, usually in late middle age, after which real income remains at a plateau or, more typically, declines. The increase is based on the accumulation of work experience, skills, and seniority, as well as possible build-up of savings, investments, or homeowner's equity.

Cross-sectional data from the U.S. Commission on Civil Rights indicate similar earnings mobility patterns for white men and women full-time workers aged 20-44. Median earnings for white men rise sharply until the mid-thirties and continue to rise at a slower rate

until at least age 44. The median earnings of white women rise much less steeply, peak in the mid-thirties, and decline from that point. For hispanic men the pattern is similar to white women's pattern, only the peak occurs in the late thirties, while for hispanic women there is only the slightest income increment at all with age.[6] These data are estimates solely of the effect of increasing age on earnings, since other factors (such as educational level and occupational prestige) were adjusted in the regression equation to isolate the age variable.

Overall, in 1975, white males between ages 20 and 44 were experiencing a median annual increase of $376, while like-aged black males gained a median $185 annually. For women, the median annual gains were $58 for whites and $30 for blacks.[7] Thus, women not only earn less than men throughout their worklives, but they gain a smaller percentage of their median income as wage increments over time.

Attachment to Labor Force

In the past, women have flowed into the workforce during economic upswings, dropping out again during periods of recession. However, the latter trend appears to be diminishing--during the 1974-75 recession, women's participation rates far exceeded predictions, based on past behavior, and rose still higher during the recovery phase. Unemployment rates are consistently higher for women than men (see Table 1.9), but even these data don't tell the full story. Women comprise two-thirds of discouraged workers--those unemployed persons who would like to work but are not seeking jobs because they are convinced their search will meet with failure. Discouraged workers are not included in unemployment figures, so the figures underestimate the true extent of joblessness.

TABLE 1.9

UNEMPLOYMENT RATES

	Raw Measure[a]			Ratios of raw measures to the majority male population		
	1960	1970	1976	1960	1970	1976
Males						
Amer. Ind./Alask. Nat.	16.4	10.9	12.2	3.49	3.03	2.07*
Blacks	8.6	7.1	15.9	1.83	1.97	2.69
Mexican Americans	8.1	6.4	11.1	1.72	1.78	1.88
Japanese Americans	2.4	1.8	2.9	.51	.50	.49
Chinese Americans	3.6	3.7	7.2	.77	1.03	1.22
Philipino Americans	4.9	5.4	5.6	1.04	1.50	.95
Puerto Ricans	8.8	6.3	16.3	1.87	1.75	2.76
Majority	4.7	3.6	5.9	1.00	1.00	1.00
Female						
Amer. Ind./Alask. Nat.	11.9	10.9	15.6	2.53	3.03	2.64
Blacks	9.0	8.4	18.9	1.91	2.33	3.20
Mexican Americans	9.6	9.1	14.9	2.04	2.53	2.52
Japanese Americans	3.2	3.2	3.8	.68	.89	.64
Chinese Americans	3.4	4.0	6.6	.72	1.11	1.12
Philipino Americans	18.7	5.1	6.0	3.98	1.42	1.02
Puerto Ricans	11.1	9.3	22.3	2.36	2.58	3.78
Majority	4.7	5.0	8.7	1.00	1.39	1.47

[a]The percent of the labor force 15 years of age and older who were out of work and actively seeking work.

*This can be interpreted as follows: In 1976 the American Indian and Alaskan Native male unemployment rate was 2.07 times as high as the rate of majority males.

SOURCE: Social Indicators of Equality for Minorities and Women (Washington, D.C.: U.S. Commission on Civil Rights, 1978), Table 3.1, p. 30.

The unemployment data suggest that at least some of women's "flow" into and out of the labor force is not purely voluntary motion. In large part this may be due to the low-status jobs held disporportionately by women; such jobs in both manufacturing and service sectors are more subject to layoff in times of economic tightening. Such lay-offs, as well as temporary workforce withdrawals, are not conducive to accumulation of the seniority which helps protect against joblessness, when seniority is a consideration.

Economist Steven Sandell, in testimony before a Senate subcommittee, cast the breaks-in-service phenomenon and its consequences in the light of women's work expectations. He stated:

> Interrupted work experience leads to low wages, reduced labor force participation, and high unemployment--the three most important labor market problems of women. The expectation of labor force withdrawal influences women's career choices, and this, in turn, affects the amount of on-the-job training they receive and their pay. Thus, the impact of childrearing is felt not only while children are in the household, but before they are present and after they are no longer a direct impediment to labor force activities.[8]

However, the pattern of women's labor force withdrawal due to family responsibilities is changing, and this should have implications for women's worklife expectations. While it is commonly believed that women leave the labor force upon the birth of their first child and remain out until all the children are grown, it has already been noted that married women with minor children are heavy workforce participants. In addition, increasingly fewer women are withdrawing from paid employment for any significant period following childbirth, as evidenced by the rise in the number of young women with small children who hold jobs. Between 1960 and 1975, the labor force participation rate for women with children under age 3 more than doubled, from 15.3% to 34.4%.

The median gap between last pre-birth job and first post-birth job is 18 months for white women with less than 12 years of schooling, 13 months for those with 12 or more years of education. For black women, the respective medians are 15 months and 8 months.[9]

The most recent data from the Department of Labor indicate that the average American woman spends at least 24 years of her life in the workforce, as compared to 6.3 years in 1900, more than a 250% increase. After 1950, worklife expectancy for women rose faster than overall life expectancy. In addition, the proportion of women working 50-52 weeks/year has grown from 46.6% in 1960 to 52.1% in 1972.[10] This figure, along with those mentioned above, points clearly to the strength and duration of women's attachment to the labor force. Paid work is not merely a passing phase of a woman's life.

Summary

Women have swelled the ranks of the labor force and are there to stay. This is true despite the inequalities they confront as they make their way in the workplace. Women workers are of all ages, races, and backgrounds. They are single, married, widowed, and divorced, and many head families. Their median educational level is identical to that of their male counterparts, and their attachment to the world of work is demonstrably strong and growing stronger.

The overall occupational distribution of working women is very narrow, as is their earnings distribution. Women are channeled into a very few fields and within those fields, into the lower-status, lower-paying jobs. Eighty percent of working women are in clerical, factory, plant, retail sales, and service jobs with little prestige, pay, or

opportunity for advancement. Women's unemployment rates are consistently higher than men's rates. All of these imbalances are even more intense for minority women than they are for white women.

A passage from the Bible states that a man shall be valued at 50 shekels, a woman at 30 shekels. It is uncanny and discouraging to realize that this 40% difference is precisely the difference between men's and women's earnings today, as it has been for many years.

Why Do Women Work?

In the aggregate, women work for the same reasons men work; economic need is the primary, though not exclusive, reason. Forty-four percent of working women do not have husbands present, and an additional 25% are married to men who earn less than $10,000 per year. Financial necessity is therefore a motivating factor for nearly three-quarters of the female workforce: either they are sole supporters or their income is needed to bring their families above the low-income level. The median contribution of working wives to family income is over 25%; among those who work full-time, year-round, it is 40%. Twelve percent of working wives provide half or more of the family income.

But other factors stand alongside economic pressures for women and men. A recent survey indicated that approximately 60% of both men and women who work would continue to do so if they were to become independently weathly.[11] A paycheck not only empowers purchasing--it also serves as an indication of the value of one's work. While many public figures have affirmed the importance of motherhood and family care, the reality remains that women who devote full time to these pursuits are dependent on the continuing goodwill and earning capacity of their husbands for their economic well-being. When either of those two necessities is

removed (as in divorce or disability), the woman finds that little tangible value has been placed on her (unpaid) homemaking services. She has lost her pension vesting due to breaks in service to raise children. Or, if she hasn't held a paying job for quite a while, if ever, she is likely to encounter difficulty in convincing prospective employers that the skills she developed highly as a homemaker (such as organization, scheduling, creative problem-solving, purchasing, and inventory control) have any relevance in the paying workplace. She can legally be denied any portion of her husband's pension, and if she was married less than 10 years, she will receive no Social Security income from the earnings she helped him acquire. She may have difficulty obtaining credit and insurance coverage of her own. Thus in addition to the sense of pride and productivity that a paycheck facilitates, a personal income offers greater economic security for both present and future. The workplace is also a major focus of social activity and stimulation which have an effect beyond working hours.

Beyond these actively motivating factors, however, lie some major changes and developments that have contributed to women's increased participation in the workforce and that have a bearing on issues of education and training. These events are delineated in the next section.

II. AN EXTERNAL CONTEXT FOR WOMEN'S MOVEMENT INTO THE LABOR FORCE

A movement as strong and widespread as women's drive into the workplace does not occur in a vacuum. While the previous section described the aggregate of working women, the focus in this section is on broad-based developments which have contributed to women's expanded participation in the workforce. These shifts are categorized as demographic, economic, or social developments.

Demographic Changes

A number of shifts in population parameters have taken place in the past 25 years, some of which are related to women's expanded participation in the workforce. Many of these are directly correlated with women's family roles, as will be seen below.

Increased Marriage Age

The figures in Table 2.1 indicate that young adults of both sexes are waiting longer to marry. In 1960 13% of women (28% of men) age 25 had never married, but by 1977 23% of women (36% of men) had remained single at 25. Advance statistics projected that 47.6% of women age 20-24 were to have remained unmarried in 1978. It would seem logical to conclude from this that, while most women will continue to marry and some will then rely on their husbands' incomes for some period of time, these women will have a longer period of pre-marital self-support than was the case 20 years ago. Thus, more women will be in the workforce for a greater number of years before marriage.

TABLE 2.1

PERSONS NEVER MARRIED BY SELECTED AGES AND SEX: 1977, 1970, AND 1960
(Percent of Age and Sex Groups)

Age and Sex	1977	1970	1960
Age 18			
Men	97.5%	95.1%	94.6%
Women	84.8	82.0	75.6
Age 21			
Men	71.8	66.2	63.4
Women	53.1	43.9	34.6
Age 25			
Men	35.9	26.6	27.9
Women	23.1	14.0	13.1
Age 65 and older			
Men	5.9	7.5	7.7
Women	6.4	7.7	8.5

	1978 (Advance Report)
Age 14-19	
Men	97.9%
Women	91.9
Age 20-24	
Men	65.8
Women	47.6
Age 25-29	
Men	27.8
Women	18.0
Age 65 and older	
Men	5.4
Women	6.2

SOURCE: U.S. Bureau of the Census, Current population reports: population characteristics, Series P-20, no. 323, Marital status and living arrangements, March 1977. Cited in Congressional Research Service, "Women in America: A Source Book," in The Coming Decade: American Women and Human Resources Policies and Programs (Washington, D.C.: U.S. Senate Committee on Labor and Human Resources, 1979), Table 2, p. 1359.

Decreased Fertility

The average total fertility rate* has decreased over the past quarter-century, from 3.7 births per woman in the period 1955-1959 to 1.8 births per woman in 1975-1976. Another way of looking at this phenomenon is to examine the lifetime birth expectations of young wives. Table 2.2 indicates, for example, that, of wives 18-24 years old, 44.5% in 1967 were expected to have 2 or fewer children, but in 1977 that proportion had jumped to 73.8%.

Obviously families are getting smaller, and accompanying that decrease should be a lessening in the number of years spent in child-bearing and childrearing. Over the long term, this trend would also be expected to lower the total amount spent on child care by a single-parent or two-earner family, theoretically resulting in a greater net financial gain by working parents.

Rising Divorce Rates

Between 1960 and 1977 the proportion of unremarried divorced persons increased from 35 per thousand to 84 per thousand (see Table 2.3). This rate is higher for women than for men, since men are the more likely to remarry. For each 1,000 married persons living with their spouses, there were 101 divorced women in 1977 (compared to 42 in 1960) and 66 divorced men. Divorced women have the highest labor force participation rates of all women; 74% of divorced women were in the workforce in March 1978.

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*Average total fertility rate is defined as the lifetime average of the total number of births a woman would have if, at each year of age, she experienced the birth rates occurring in the specified year. For example, if the average woman lived 65 years, and the birth rate were 3.0 births per woman for 40 years and 2.5 births per woman during the other 25 years, the average total fertility rate would be:

$$\frac{(40 \times 3.0) + (25 \times 2.5)}{65} \text{ equals approximately } 2.8$$

TABLE 2.2

LIFETIME BIRTH EXPECTATIONS OF WIVES 18 TO 29 YEARS OLD BY AGE: 1967 AND 1977

Age and Birth Expectations	1967 (Feb.-Mar.)	1977 (June)
Wives 18 to 24 years old		
All wives	100.0%	100.0%
0 or 1 births	7.4	17.9
2 births	37.1	55.9
3 births	29.8	18.9
4 or more births	25.7	7.3
Wives 25 to 29 years old		
All wives	100.0%	100.0%
0 or 1	7.3	17.9
2 births	29.3	50.4
3 births	33.5	22.7
4 or more births	29.9	9.0

NOTE: Includes children already born and expected number of additional children. Data restricted to currently married women reporting birth expectations. Civilian noninstitutional population.

SOURCE: U.S. Bureau of the Census, "A statistical portrait of women in the United States," 1976. And U.S. Bureau of the Census, "Current population reports: population characteristics," June 1977. Cited in Congressional Research Service, "Women in America: A Source Book," in The Coming Decade: American Women and Human Resources Policies and Programs (Washington, D.C.: U.S. Senate Committee on Labor and Human Resources, 1979), Table 4, p. 1366.

TABLE 2.3

DIVORCE RATIOS
(Number of Divorced Persons per 1,000 Married Persons Living with Spouse)

Sex, Race and Age	Year		
	1960	1970	1977
Total	35	47	84
Men	28	35	65
Women	42	60	101
Race			
Whites	33	44	78
Men	27	32	63
Women	38	56	93
Blacks	62	83	161
Men	45	62	106
Women	78	104	217
Age			
Under 45	30	44	91
Men	22	31	73
Women	37	55	106
45 years and over	42	51	76
Men	35	38	59
Women	51	67	95

SOURCE: U.S. Department of Commerce, Bureau of the Census, "Current population reports: population characteristics," Series P-20, no. 323, Marital status and living arrangements, March 1977. Cited in Congressional Research Service, "Women in America: A Source Book," in The Coming Decade: American Women and Human Resources Policies and Programs (Wash., D.C.: U.S. Senate Committee on Labor and Human Resources, 1979), Table 3, p. 1363.

Female-Headed Families

The rise in the proportion of families maintained by a woman, no man present, has been nothing short of astonishing. Whereas in 1950, 9.4% of families were maintained by a woman with no man present, by 1978 that percentage had jumped to 14.4%, or 8.2 million families. Apprximately a third of black families are headed by women, compared to about 10% of white families.

The income of families headed by women is less than half of that of families headed by men. Most female family heads are employed; financial need requires it. These women are likely to continue to increase the numbers of the female workforce.

Two-Earner Families

Eighty-three percent of American families contained both husband and wife in March 1978, and in 60% of those families both partners held paying jobs. Labor force participation for married women with husband present increased from 40% in 1968 to 48% in 1978.

As would be expected, two-earner families enjoy a significantly higher income than do single-earner households. The average family income in 1977 was $20,415 for a family with two or more earners, versus $13,218 for a single-earner family.

Increased Life Expectancy

The average life expectancy at birth has increased for both sexes, but the increase has been greater for women (see Table 2.4). White women now have an average life expectancy of over 77 years, while for non-white women the expectancy is nearly 73 years. Regardless of race, women as a group outlive their same-race men by an average of 8 years.

TABLE 2.4

LIFE EXPECTANCY AT BIRTH, BY SEX AND RACE: 1920, 1950, 1976

Year and Sex	Race	
	White	Black and Other
1920		
Men	54.4	45.5
Women	55.6	45.2
1950		
Men	66.5	59.1
Women	72.2	62.9
1976		
Men	69.7	64.1
Women	77.3	72.6

SOURCE: U.S. Bureau of the Census, Statistical Abstract of the United States, 1978, 99th ed. Cited in Congressional Research Service, "Women in America: A Source Book," in The Coming Decade: American Women and Human Resources Policies and Programs (Wash., D.C.: U.S. Senate Committee on Labor and Human Resources, 1979), Table 1, p. 1356.

A number of possible work-related changes could be hypothesized from this trend. The extra longevity is added to what are retirement years for most people; women might be more inclined to acquire earnings in their own right as a protection against more years of unemployment, particularly since they are likely to be widows for a portion of that time. Or, men and women may rebel against many years of forced joblessness due to mandatory retirement and demand extended worklife and/or work phase-out plans. Already there is evidence of the latter in recent legislation pushing the mandatory retirement age from 65 to 70. At the same time, however, more men are choosing to retire before age 65. At best, one can say that currently observable shifts are toward demands for a greater number of work-pattern options.

Economic Developments

The years following World War II have been, until recently, characterized by rapid growth and expansion. America, as an industrial society in the post-war period, has been busily increasing its productivity and trade. The civilian labor force has concomitantly increased, with women accounting for three-fifths of its growth during the past 30 years.

However, our economy is shifting--its growth rate has slowed, and there is evidence for the statement that America is now a post-industrial society. Changes in the economy have an effect on everyone; some of these developments and their impact on working women are highlighted below.

Shift to Services

Whereas the U.S. economy has been primarily based on manufacturing and producing, it has now moved into a primary emphasis on services. Currently, about 65% of the workforce are employed in the service sector as compared to the goods-producing sector (that is, manufacturing and agricultural jobs). One projection estimates that, by 1990, that proportion will rise to 80%.[12]

Economists have viewed this shift as a natural consequence of the increased standard of living brought about by the period of post-war expansion. As people acquire greater purchasing power through gains in real income, they perceive their time as more valuable, and they tend to purchase services that they would otherwise spend their own time performing.

The predominance of service jobs is a fundamental change in the economy whose implications are multiple and far-reaching, though not completely cheering. It is in service jobs that women have made their greatest inroads into the workplace--at least 75% of working women are in such occupations. Expansion of the service sector brings women both good and bad news.

First, the kinds of service occuptions that women tend to enter are more able to accommodate them with jobs. The information processing field in particular has grown by leaps and bounds, encompassing 50% of the entire workforce in 1970, and women have moved in as clerical workers, computer programmers, and the like. While the growth in information processing jobs is expected to slow in the next decade, the field will remain predominant in the economic structure, and women can expect to maintain their stronghold in it.

The other side of this coin is that the expanding service jobs tend to pay low wages. In the period from 1950 to 1976, the five industry groups paying consistently above-average wages increased their workforce by 28%, but the three groups whose wages fall below average more than doubled their workforce. Service industries, the fastest-growing and also relatively low-paying groups, experienced a 172% increase in employees during that time. Thus, where the jobs are is where the money isn't.[13]

Even in some of the new fields advertised as wide open for career development, such as health paraprofessional, the pay is relatively low and there really is no recognizably consistent mobility structure. Rather, the employee's progress is more dependent upon the subjective patterns of her/his immediate supervisor.

Thus, while a service economy has proved more hospitable to women workers when measured by the number of female-accessible jobs, it is unlikely to fulfill the promises of an earlier time--even if women achieved equal status to men in the workplace.

Inflation

The rate of economic inflation has risen dramatically in the past decade to the point where people are genuinely concerned about their financial ability to meet such goals as putting their children through college and securing adequate retirement incomes. The rise in two-earner families has accompanied rising rates of inflation, though it is not solely caused by inflation.

One might well question the degree to which inflation has actually eaten into the real incomes of middle and lower class families. In a

recent article, Nicholas von Hoffman noted that "most American wage earners are making, in real dollars, about what they were in 1970. They're breaking even."[14] Given smaller average family sizes, one might expect adult workers to have maintained their standard of living. Inflation is helpful to those with debts such as home mortgages and automobile payments. Inflation tends to redistribute income from the rich to the poor by lowering the real value of interest payments and market portfolios. This is beneficial to those low-income people not on fixed incomes such as public assistance or retirement pensions. But inflation erodes savings--by 27% in the past five years, in fact[15]--and it makes financial planning a more anxiety-fraught exercise because future costs are unpredictable. Purchases like a child's college education and retirement security come out of accumulated savings for most people; therefore, inflation poses a very real threat to these long-range goals. For many families, a second earner is viewed as a hedge against predictable and unpredictable cost increases.

Thus, while factors other than inflation have had a bearing on the rise in workforce participation of married women, it seems logical that the fears of future financial distress generated by inflation have contributed to the increase in working women.

Demand for Equal Economic Opportunity

This century has witnessed a sweeping civil rights movement that has broadened and intensified steadily since its inception. Whereas the term "civil rights" was first connected with black activism and the matter of equal access to public services, facilities, and institutions, and the equal opportunity to exercise legal rights, it soon became clear

to activists that economic issues were of central importance. In addition to a strong black movement for equality, we now see vigorous efforts on the part of hispanics, blue-collar workers, and women to secure equal economic opportunity.

The women's movement, like the black civil rights movement, did not cite economic discrimination in its earliest calls for justice. Rather, women's initial protest centered on their confinement to the roles of mother, wife, and homemaker. The option of a job outside the home was heralded by feminist leaders as a woman's route to personal independence, fulfillment, and dignity.

While the call for options was, and is, a sound and meritorious one, grassroots feedback soon revealed that the above-mentioned arguments for choosing employment have flaws. (These inequalities have been discussed in the first, descriptive section of this paper.) That realization led to the demand for "equal pay for equal work." This demand, too, was subsequently modified when it became apparent that, because of occupational segregation, women were receiving pay equal to that of their female counterparts, but less than that of men doing jobs of a similar skill level, with similar levels of job requirements. Thus, stenographers in a given company were paid equally to each other (nearly all being female), but the men who processed supplies and inventory were earning considerably more. Now women seek "equal pay for work of comparable value," a phrase which strikes at the core problem of undervaluation of work done by women.

This may well be the biggest single issue of the present-day women's movement, reflecting as it does the awareness that, as a society, we value less those individuals who are paid less. While preferred

explanations for disparate valuing have ranged from physical strength to workforce commitment, evidence from a number of studies indicates that discrimination accounts for 85% of the earnings differential between men and women.[16] That is, such objectively job-related factors as education level, experience, and skill contribute only 15% of the variance between men's and women's collective earnings.

The determination of "comparable value" is currently a somewhat murky area, since there is no absolute quantitative standard of comparison. The Department of Labor's job classification manual is the closest approximation to such a standard, but it is seriously flawed--in one instance, "child care worker" and "chicken offal shoveler" are categorized as requiring similar skill and training. However, determination of "worth" of work should take into account the amount of education and training required for its performance, the degree of skill necessary, and the specific tasks performed.

The Census Bureau has recently suggested an occupational classification based on the nature of job tasks, rather than job title.* This approach has encountered opposition from the statistical community, ostensibly because it would generate data that would not, in raw form, be strictly comparable with previous Census data, thus making longitudinal comparisons more complicated. While these statistical problems are valid and important, it would seem that such a task-oriented occupational taxonomy would help to further a sex-free, race-free evaluation of work.

The demand for equal economic opportunity is a critical issue in the examination of worker education and training to the extent that

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*Readers interested in further information about this proposed classification can contact Dr. Lloyd V. Temme, now at the U.S. Commission on Civil Rights, 1211 Vermont Avenue, N.W., Washington, D.C.

education is perceived, or not perceived, as a path to economic enrichment. Data contributing to such perceptions are discussed more fully in Section III of this paper.

Social Changes

Because our standard of living has risen since the Second World War, Americans have had the opportunity to consider matters concerning the quality of life, rather than simply striving to assure its continuance. Indeed, it is quite probable that the current movements for equal opportunity on the part of racial/ethnic minorities and women would never have occurred if (1) their participants had not perceived sizable economic payoff in the event of success and (2) economic distress had not already lifted enough to release sufficient time and energy for thought, organization, and action.

The advancement of our overall economic well-being has, however, permitted a greater consciousness of such concepts as fairness, dignity, wholeness of life and person, and amount and use of leisure time. These considerations have brought about changes in our social fabric that affect the family and the workplace and the roles of women in each of these institutions. While some of the observations below can at best be only indirectly documented, they may be of value for future planning in work and education for women.

Emphasis on the Individual

Although "rugged individualism" is a part of American philosophical heritage, today's focus on the individual is of a different nature. Whereas the earlier doctrine decreed that an individual was personally responsible for hewing her/his own path, it ignored the adequacy of the tools provided for the task. Current philosophies more encompass a belief in assuring

equal individual opportunity. Some social activists now argue that freedom of choice, a key value, is negated if the individual cannot choose from all available options at the outset. Such broad freedom of choice requires that people be provided with the attitudinal, informational, and skill-related equipment necessary for matching individual proclivities to workplace opportunities.

Thus, women point out that the inequities they face in the workplace are a natural product of sex-based differentiation from birth onward. Girls learn "appropriate" sex-role behaviors very early, and they are informed in overt and subtle ways which jobs are for women and which are for men. The inculcation of sex-role behaviors supersedes in strength and intensity the consideration of individual desires, talents, and potentials. Such channeling, then, helps to deny women the basic attitudinal posture that would permit informed, rational choices concerning occupations as well as other spheres of life affected by sex-role stereotypes.

In order to enjoy the right to freedom of choice, as defined above, girls and women must be equipped with the belief that they may select any occupation that their wishes and talents, and market conditions, permit; they must have ready access to information on those non-saturated occupations that might fit with their individual inclinations; they must be able to obtain the education and training necessary to acquire skills and credentials required for the occupations they select; and they must be assured of no less than equal competition with other groups for available jobs.

These conditions require the recognition of the individual as something distinct from a member of social institutions. The women's movement has brought to many women the realization that they are entitled to choices, that

they may opt to undertake roles other than, or in addition to, those of wife, mother, and homemaker. Thus far, the tangible results have been more working women, a small but increasing number in non-traditional jobs, and a number of policy efforts to prevent educational and employment discrimination on the basis of sex. Family changes have occurred, too. While shifts in women's attitudes and alternatives are by no means solely responsible for observed decrements in family cohesion, it is possible that the independence offered by realization of workplace opportunities makes the economic support provided by the traditional nuclear family a choice, not a necessity, for some women.

Changes in the Family

In America's pre-industrial years, children were needed to help with heavy workloads and provide additional income to the family. Later, children were expected to provide for their parents during their old age. Children were put to work for the family as soon as they were able. In addition, women's role of homemaker required many more hours and much greater physical labor than is the case today, as is generally true of the work men do. Therefore, the rearing of children and the maintenance of an intact family were formerly of immediate individual urgency.

In today's post-industrial society, children are not only unnecessary for the economic well-being of the family unit, but they are also regarded by a growing number of adults as an option to be weighed against the personal and financial resources they consume. Because their income is not as frequently required, children remain economically dependent on their parents for a longer period of time than used to be the case. As to old age support, some observers note that the decline of the extended family

and the advent of Social Security have been accompanied by a decreased sense of obligation on the part of offspring to ensure their parents' economic security.

The extent to which children have become less and less a focal point of the family is evident in examining young couples' considerations in deciding whether to have children at all. (Indeed, the shift from "when" to "whether" to have children is significant.) In a recent article, Scott Spencer points out that "the question is not whether or not to bring children into the world, but whether we ourselves will feel totally fulfilled as adults if we do not experience parenthood."[17]

Besides basic financial considerations, parental responsibilities don't mesh easily with job responsibilities and promotion requirements, and childrearing duties eat into leisure time. An individual's choices become somewhat reduced by parenthood. While in strict terms one might be able to "afford" a child, s/he might not be able concomitantly to afford a desired lifestyle.

If these observations are correct, then many couples who plan children today do so not out of necessity or social expectation but because they wish to enjoy children and taste the experience of parenthood. That this is not necessarily an all-consuming experience for women any more is apparent from the number of women who return to work before their children enter preschool (be it out of choice or necessity).

A shift in family focus from children to adults has far-reaching implications for women and work. If benefit to both partners accrues from the woman's employment, and if these benefits outweigh the perceived benefits of raising children, then expectations for motherhood and years of child-rearing should become drastically reduced. Factors once considered irrelevant

or subordinate to parenting decisions, such as the couple's lifestyle and the woman's occupational aspirations, now play a strong role in such decisions. Families are smaller, and mothers of even very young children are working outside the home in greater numbers, despite their dissatisfactions with the convenience and quality of child care alternatives available to them. If this trend continues and work roles become paramount for women, factors such as education and training (before, during, and after the working years) should take on added importance to them.

Questions in Quality of Work/Family Life

The previously discussed shifts toward greater recognition of the individuality and options of women bring with them problems in the reconciliation of work and family roles. While more and more men recognize the value of their wives' paid employment, women still carry the major share of domestic and childrearing responsibility. A 1977 survey of working parents found that 48% of working women reported spending at least 3½ hours per working day with their children, compared to 13% of the working men. Similarly, 44.2% of working women with working husbands reported spending at least 3½ hours on home chores on working days, while only 4.8% of working men with working wives reported this much time.[18]

Child care is a parent's problem, not a woman's problem, and household chores are a problem for all household dwellers. However, the sociocultural role expectations transmitted to both sexes continue to nurture the belief that these duties fall into the sphere of "women's role." Most working women feel they have two jobs -- their paid job and their home and family responsibilities. There has been much public discussion, serious and otherwise, of possibilities for more egalitarian sharing of these tasks by

men and women, including such concepts as paternity leave and time off from work for children's needs (e.g., illness, dental appointments) for fathers. These ideas have not made great headway in implementation, but interest in them has not waned.

A family with two working parents, or a single-parent family, confronts some very real difficulties in time management and division of labor. In the matter of childrearing, for example, parents and psychologists alike have stated in recent years that it is the quality of time, not the quantity, that is critical. Yet while there is truth in this view, it is rare to find parents who are thoroughly convinced of it -- the deeper belief seems to be that <u>both</u> quality and quantity of time with children are important. Families with no non-working parent face a painful, ongoing dilemma. Beyond assuring the child's basic needs, time for just being with the children and participating in family activities seems all too short to many. Mothers, and a growing number of fathers, often feel constrained to choose between their families and their jobs. The current upsurge of articles in women's magazines on how to have the best of both is promulgating what is for most people a myth. Anecdotal evidence indicates that the bulk of women readers absorb these pieces through a film of fatigue and wonder what is wrong with themselves.

Child care that parents can trust can, of course, go far to ease some of the strain. But complaints have surfaced repeatedly at meetings of working women and child care advocates across the country, such as the regional dialogues held by the National Commission on Working Women, a child care conference cosponsored by the Commission and George Washington University in 1978, and a 1979 conference on child care held by the Chicago

chapter of the Coalition of Labor Union Women and the Amalgamated Clothing and Textile Workers' Union. Child care concerns voiced include:

--the cost of quality alternative care (estimated by the U.S. Senate Finance Committee at around $1300 for minimum acceptable quality, and $2350 for desirable quality, in per-child expenditures);

--limited hours of availability of alternative care;

--convenience of physical access to the care facility (e.g., on public transportation routes or proximity to the parent's worksite); and

--inability of many facilities to care for a slightly ill child.

Despite these reported difficulties, a recent report from the Congressional Budget Office concluded that lack of child care is not a significant barrier to women's working.[19] In the narrowest sense, this is true: women who must work do whatever they have to in order to hold a job, even if it means leaving the children in poor quality care or entirely unattended. But to infer the absence of barriers is specious reasoning -- how many phone calls home, how much time spent worrying about the children, comprise a "barrier"? As Bonnie Vaughn, a grocery cashier from Michigan, queried at a recent Senate hearing, "Do you know how bad it is to say to your child, 'How bad are you bleeding?' because you can't tell your boss, 'I have to go home because my child has been injured.' ...When a neighbor calls you back and tells you how bad the injury is, you will take the chance of asking your boss if you can take the child to the emergency room."[20]

In addition to the responsibilities of parenting, the question of who is to perform the non-market household functions looms large in many two-earner families. These functions include such tasks as household chores, shopping, and going to the dry cleaners. Traditionally these responsibilities have been assigned to the woman and that has not changed greatly since she

has also become a jobholder. Through public discussion, if not private protest, men are becoming more sensitized to sharing these functions, but the discovery process is not a happy one.

Increased Expectations for Leisure Time

The issue of time management is important not only for work, but for play as well. Leisure has become a big industry in the U.S., reflecting the greater amounts of money and time we have come to invest in it. As both workday and work week have shortened, the business of playing has become a major conscious activity, and our manner of performing it has grown more grand. Evidence of this escalation is everywhere: 10-speed bicycles for casual pedaling; motorized campers for a week in the mountains; special (and expensive) clothing for jogging/tennis/skiing; and the pleasurable, costly, and endless quest for the most technologically replete stereo or camera are examples. One study found that our leisure time is so highly valued that, given a choice, midlife workers surveyed reported that they would rather have time off from work than that time's equivalent in additional pay, particularly if the gain in free time is in the form of extended periods of time away from work, such as vacations.[21] This finding may indicate that the average midlife worker is content with her/his income, or it may suggest s/he feels a lack in things that money can't buy (such as family time), or both.

The issues of family and leisure are mentioned to suggest a point that will be further elaborated in the final section on "Policy Implications," namely, efforts to extend worker education and training for women and men will fall short of their mark if they fail to consider family and leisure values. If worker education is related to job advancement and/or satisfaction;

if workplace requirements already place a strain on two-earner or single-parent family functioning; and if leisure time is a consideration in family and work decisions -- then educators and employers would be well advised to plan their goals and structures in accordance with all of these factors.

Career Transition

Workers are changing occupations more frequently than they used to, and many of them are seeking more education to facilitate the change. Between January 1977 and January 1978, 11.5% of employed men and 11.7% of employed women entered a different occupation. The mobility rates were lowest for farmers and professionals -- occupations requiring extensive capital, education, or training -- and highest for non-farm laborers.[22]

A sample survey of 1000 adults (aged 16-65, not full-time students) undergoing or anticipating job or career transitions, conducted by the College Entrance Examination Board, questioned men and women about the type of transition they were experiencing and their approaches to it. The researchers inferred from their sample that 40 million adults are in actual or anticipatory transition. Sixty percent of them are women. These women had the following characteristics:

--62% were married and living with spouse;

--56% were wage earners;

--25% were principal wage earners;

--46% were employed at the time of the survey;

--19% earned at least $10,000/year (compared to 66% of the men surveyed);

--44% had some postsecondary education;

--32% had worked more than 10 years; and

--32% had held no full time job in the past 5 years.

Sex differences were found in type of transition and motivation for change. While 88% of the men in transition were changing jobs, this was true for only 46% of the women. Another 48% of the women were re-entering the workforce. (For all adults sampled, the reason most often given for workforce withdrawal was child care and homemaking responsibilities; nearly 75% of the unemployed adults in the sample were homemakers.)

Forty-three percent of the men, versus 24% of the women, anticipated a change in their job level or status. Fifty-eight percent of the men, and 44% of the women, had actually taken some steps toward making the transition.

Most adults in transition wanted to move from semi- or unskilled jobs to professional or skilled positions. Seventy-seven percent of the sample had a specific occupational goal. More men wanted to be managers and craftworkers, while more women were aiming toward clerical and service jobs. A positive correlation obtained between amount of education and the position sought -- the most-educated wanted the most professional jobs.

Men were more likely to cite "insufficient salary" and "insufficient advancement potential" as reasons for transition, but women more often cited the need for money as a key determinant of change.

Sixty-two percent of the sample reported plans to seek more education/training to prepare for the anticipated job shift. Most of these people wished to upgrade their skills and/or acquire new credentials.[23]

The extent to which people are seeking to enhance their occupational mobility is not surprising, given the market factors which operate to reduce it. The rules governing entrance to occupations have grown more complex; certification and licensure are used with increasing frequency to reduce job competition rather than guarantee competence. Unions are selective in

apprenticeships and membership. Employers make choices on the basis of paper credentials or their own screening tests. Further, the paths to advancement have changed. Employers select college graduates as executive trainees rather than workers who have come up through the ranks. These changes have a number of results: workers are paid less and reach their income peak earlier in their work lives, and the peak isn't as high (relative to starting wage) as it is for managers and professionals. A "balkanized" labor market ensues, whereby the less-educated are restricted to a "secondary" market of undesirable, low-paid and irregular jobs.[24]

Thus, it is no longer young people alone who feel compelled to seek education for purposes of improving their competitive position. Again, however, most women in transition are not seeking the "top" jobs -- their goals are more frequently clerical and service occupations, while men look for higher-paying craft and managerial jobs.

The CEEB investigators predict an increase in the number of adults in career transition due to (a) lowering of artificial barriers such as sex discrimination and (b) continued public concern about educational and credential requirements unrelated to job performance. The data reported in the present paper, however, raise questions about the depth of, and approach to, transition. Formal removal of artificial barriers does not appear perforce to result in significant tangible improvements in job equity for women. In addition, the CEEB paper itself suggests that, despite the cited concern over non-performance-related credential requirements, workers still perceive those credentials as necessary for advancement; thus they continue to pursue them.

III. OPPORTUNITY: UTILIZATION AND IMPACT

The focus of worker education and training has expanded in recent years as unemployment and underemployment rates have risen, educational credentials have become inflated, traditional-age college enrollments have declined, and activities during life-cycle stages have become more varied. What follows is an overview of women's participation in adult education. Government and private-sector opportunities in worker education are examined with an eye to the rates of female participation, determinants of and barriers to participation for women, and program outcomes. Also noted is legislation specifically relevant to women's educational and training needs which may not have resulted in service programs per se.

An Overview: Women's Participation in Adult Education and Training

The National Center for Education Statistics (NCES), administered by HEW, compiles data on adult participation in education. Their published statistics on adult education define that commodity as "organized learning to meet the unique needs of persons beyond compulsory school age who have terminated or interrupted their formal schooling."[25] Thus, the NCES figures discussed below are based on the U.S. population over age 17 who are not full-time high school or college students.

The most recent published NCES data on adult education is based on the year ending in May 1975. During that year 11.6% of the above-defined population participated in adult education. Women were 52.7% of the participants. Two-thirds of these women were working or seeking work; almost one-third were full-time homemakers.[26] A greater proportion of white women (12.0%) took courses than did black women (7.6%).[27]

Between 1969 and 1975, female participation in adult education increased 44.7%, while the adult female population grew by only 12.1%. Male participation, by contrast, rose by just 18%, compared to adult male population expansion of 13.1% during this time period.[28]

Of women taking adult education courses in 1975, 36% were taking at least one course they described as "occupational training." Another 23% described their courses as "general education." Forty-one percent of the female adult education students took courses in "personal and family living" or "social life and recreation." This differs significantly from the male participants' course distribution of 60% occupational training, 11% general education, and 18% personal/family living or social/recreational.[29] (These categories are not exhaustive and participants may indicate more than one category, so percentages don't necessarily add to one hundred.)

Among women participants, racial differences are apparent in course distribution. While 21.6% of white women participants took general education courses, 43.8% of black women participants did so. (The NCES report does not provide data on hispanic men and women specifically.) In the category of general education, nearly 4% of white women, and nearly 16% of black women, were enrolled in adult basic education. Approximately 18% of white women and 28% of black women were taking high school and college courses for credit.

About 36% of white women, and 44% of black women, described their courses as "occupational training." And while 44% of white women were enrolled in personal/family living or social/recreational courses, this described only about 12% of black women participants.[30]

As might be expected, these racial differences among women participants are also found in the reasons they give for enrolling in educational

programs. These reasons and the percentages of black and white women stating them are shown in Table 3.1. It would appear from these figures that the economic pressures which hit blacks, as a group, harder than whites are reflected by black women's heavier concentration in courses targeted at improving their work status. The fact that a greater percentage of black than white women are heads of families could well be another factor in this differential.

The proportions of men and women taking adult education courses offered by traditional postsecondary institutions are very similar, but there are differences in participation in courses offered by institutions whose primary purpose is not education. The percentages of courses taken by men and women from various sponsors are displayed in Table 3.2. These data suggest that men are more likely than women to take courses offered by employers and labor or professional groups, while women are more likely than men to enroll in community offerings. Part of this disparity may be explained by the greater percentage of men describing their courses as "occupational training.

There are also differences between men and women in the credit objectives of the courses they take, as can be seen in Table 3.3. Women are slightly more prevalent in secondary-level credit offerings. The postsecondary credit offerings draw similar proportions of men and women, although there is a somewhat larger proportion of men in trade/professional programs. Men are more likely than women to take non-credit job-related courses, while the reverse is true for non-credit, non-job-related courses.

Who is paying for these courses? Table 3.4 indicates that women are more likely than men to pay for their own educational pursuits, while men are more likely than women to have those pursuits funded by their

TABLE 3.1

PERCENTAGES OF BLACK AND WHITE FEMALE PARTICIPANTS IN ADULT EDUCATION, BY REASON FOR TAKING COURSE, FOR YEAR ENDING IN MAY 1975

Reason for Taking Course	White Female Participants	Black Female Participants
General information	13.9%	12.9%
Improve or advance in current job	31.2%	41.8%
Get a new job	11.6%	21.2%
Personal/family interests	36.5%	19.6%
Social/recreational interests	11.3%	1.1%

SOURCE: Participation in Adult Education (National Center for Education Statistics, 1975), Table 2, p. 19.

TABLE 3.2

PERCENTAGES OF MALE AND FEMALE PARTICIPANTS IN ADULT EDUCATION, BY SPONSOR OF COURSE, FOR YEAR ENDING IN MAY 1975

Sponsor of Course	Female Participants	Male Participants
Grade or high school	12.0%	4.7%
2-yr. college or vocational-technical institute	18.0%	19.2%
Vocational, trade, business, or flight school	6.0%	7.3%
4-yr. college or university	22.0%	21.0%
Employer	8.0%	17.0%
Community organization	11.0%	4.9%
Labor organization or professional association	3.0%	7.2%
Government agency	7.0%	4.8%

SOURCE: Participation in Adult Education (National Center for Education Statistics, 1975), figures extrapolated from Table 29, p. 73.

TABLE 3.3

PERCENTAGE OF COURSES TAKEN BY MEN AND WOMEN, BY COURSE CREDIT OBJECTIVE, FOR YEAR ENDING IN MAY 1975

Credit Objective	Female Participants	Male Participants
Credit toward:		
8th grade certificate	.3%	.0%
high school completion	3.9%	1.8%
certificate or license in trade or profession	9.4%	14.4%
2 or 4-year college degree	13.2%	16.5%
post-graduate or professional degree	10.0%	9.4%
Credit not used	4.8%	4.9%
No credit, but job-related	20.0%	32.5%
No credit, not job-related	35.0%	16.0%

SOURCE: Participation in Adult Education (National Center for Education Statistics, 1975), figures extrapolated from Table 31, p. 77.

TABLE 3.4

PERCENTAGES OF MALE AND FEMALE PARTICIPANTS IN ADULT EDUCATION, BY SOURCE OF PAYMENT FOR COURSES, FOR YEAR ENDING IN MAY 1975

Source of Payment	% of Female Participants Using Payment Source	% of Male Participants Using Payment Source
Self or family	66	46
Employer	18	37
Public funding	15	18
Private organization	6	5

(Persons often listed more than one source of payment, thus totals do not add to 100%.)

SOURCE: Participation in Adult Education (National Center for Education Statistics, 1975), figures extrapolated from Table 23, p. 61.

employers. For both men and women, however, personal or family income was the most frequently cited source of payment.

While the NCES report does not provide data on barriers to participation in adult education as such, it does supply figures on the reasons given by respondents for dropping courses they had undertaken. Overall, in 1975 6.9% of persons taking one or more courses dropped at least one of them. The most often-stated reasons for dropping a course are outlined in Table 3.5 for black and white, male and female participants. Dissatisfaction with the course was the most frequently stated reason for all groups. Women of both races were more often thwarted in their educational efforts by child and family care needs, although the relatively high proportion of black men giving this reason for dropping a course is noteworthy. Illness, either their own or a family member's, was a factor for a higher proportion of women than men as well.

In summary, then, women comprised over half of the 1975 participants in adult education. Two-thirds of them were in the labor force; one-third were enrolled in occupational training courses. Over 40% took courses related to personal or recreational interests. Courses taken by women were less likely to be sponsored or funded by their employers than were courses taken by men. A greater number of women than men were found in community-sponsored courses. Women were also more likely than men to be paying for their education out of their own or family income. A greater proportion of women than of men took non-credit courses unrelated to employment. Finally, family demands led to more course drops for women than for men.

TABLE 3.5

PERCENTAGES OF PARTICIPANTS IN ADULT EDUCATION WHO DROPPED ONE OR MORE COURSES, BY SEX, RACE, AND REASON FOR DROPPING COURSE

Reason for Dropping Course	White Males	White Females	Black Males	Black Females	All
Changed residence	3.0%	6.2%	6.3%	11.4%	5.2%
Changed job or new job	7.9%	3.4%	11.4%	11.3%	5.9%
Course disappointing or too demanding	27.0%	26.0%	17.0%	13.2%	24.8%
Financial problems	6.1%	2.4%	11.8%	12.3%	4.8%
Own or family illness	7.1%	14.1%	6.6%	10.7%	11.2%
Too busy	17.2%	15.9%	.0%	2.7%	15.8%
Child or family care	.9%	7.2%	15.8%	19.1%	5.9%

SOURCE: Participation in Adult Education (National Center for Education Statistics, 1975), Table 24, p. 63.

These facts describe the undifferentiated spectrum of adult education offerings. Let us now examine federally-supported initiatives in this area.

Federally Supported Programs in Worker Education and Training

The federal government supports a number of programs related to employment skills. The services provided range from direct job placement to counseling, vocational training, and basic adult education. Major federal provisions are outlined below.

Comprehensive Employment and Training Act (CETA)

CETA was enacted in 1973 to decentralize planning and delivery of education and training programs to state and local government levels. Its purpose is to provide training and employment opportunities to economically disadvantaged, unemployed, and underemployed persons. The services CETA mandates include classroom training, on-the-job training, work experience, and public service employment. These activities are carried out by 450 prime sponsors -- state and local agencies which oversee, coordinate, and deliver services. To qualify for CETA assistance, an individual must meet criteria pertaining to unemployment, economic disadvantage, and/or special target group membership. Not all of these criteria necessarily apply concurrently to a given applicant.

The length of time a CETA client spends in the program varies according to the services received — e.g., type of training undertaken. The client is paid throughout her/his duration in the program. Some prime sponsors offer child care and transportation assistance to clients.

Title I of CETA authorizes classroom training, on-the-job training (OJT), and work experience. In Fiscal Year 1975, women comprised 56% of classroom trainees, 26% of OJT trainees, and 50% of work experience clients.[31] Women were 44.6% of program terminations, and they were 42.3% of job placements.* Overall, 45.6% of the Title I participants in FY 75 were female.[32] In FY 77, women were 47.7% of the unemployed, 54.9% of the Title I-eligible population, and 47.9% of Title I participants.[33]

The proportion of female clients in Title I activities has been growing in recent years. According to a report by the National Research Council, this increase is related to several factors, including (1) increased activism of women in local manpower planning councils, (2) changes in program mix, (3) less emphasis on OJT, and (4) changing preferences of CETA service deliverers.[34]

The proportion of female clients is lower in the public service employment (PSE) programs under Titles II and VI. In FY 77, women were 54.2% of Title II eligibles and 39.4% of participants. For Title VI-A, the eligible population was 54.2% female, while participants were 37.5% female. Under Title VI-B, a more tightly targeted PSE program, women were 64.9% of eligibles and only 32.8% of participants.[35]

Among Title II programs, 31.7% of terminations and 32.3% of placements were women in FY 75, while under Title VI the respective figures were 26.1% and 21.5%.[36] Thus, under all three titles the proportion of female placements was lower than female participation percentages,

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*"Placement" is defined as leaving the CETA program for unsubsidized employment.

which in turn were lower than female eligible percentages. The reverse, of course, is true for men; in FY 76 the PSE clients under CETA Titles II and VI were predominantly adult, white, non-disadvantaged males with at least a high school education.[37]

In FY 76, when women were about 44% of the U.S. long-term unemployed population, their representation in Title II PSE programs was 36%, and in Title VI PSE, 35%. The targeting ratio for PSE programs (percent of target group in program divided by percent of target group in eligible population) was therefore around .80 for women, while for men it was approximately 1.16.[38]

One reason for women's underrepresentation in PSE programs is the congressionally-mandated preferential treatment for military veterans, most of whom are male. Veterans have been about 17% of the unemployed during the 1970s, yet in FY 77 they held 23% of Title II PSE jobs and almost 25% of Title VI PSE slots. As previously noted, women's proportion of PSE slots has always been lower than their proportion of the unemployed.[39]

The Job Corps, mandated under Title IV of CETA, provides job training and experience to youth aged 16-21. In FY 77, when women aged 16-21 were 47% of the unemployed, new Job Corps enrollees were 31% female, despite the Corps' statutory mandate to strive for 50% female enrollment.[40]

Here, too, occupational segregation prevails; women were 100% of preschool teachers and aides, 92% of enrollees in health-related occupations, and 82% of those in clerical/sales jobs. Overall, 75% of women completing Job Corps training were in traditionally female fields.

Conversely, women were 5.5% of trainees in electrical appliance repair, 3.4% of those in construction trades, and 2.5% of participants in auto/machine repair.[41]

These data indicate that women are underserved in proportion to their numbers in the CETA-eligible population. Further, in her Senate testimony, Isabel Sawhill stated that:

> There is evidence that women have been disproportionately concentrated in the least effective programs and that placements of women enrollees via CETA...tend to reproduce the patterns of occupational segregation and wage differential found in the regular labor market. For example, in FY 76 (the latest data available), 99 percent of all placements into craft jobs under CETA were male while 85 percent of all placements into clerical jobs were female.[42]

Additional data suggest that the percentage of women in given CETA programs is inversely related to the per-client program costs. Table 3.6 shows that more expensive programs serve a lower percentage of women than programs of lower cost.

Women in clerical PSE jobs earn, on average, 82% of male PSE clerical workers' earnings. Women in PSE service occupations earn 87% of their male counterparts' wages. The 25% of CETA-employed women in "professional, technical, managerial, and administrative" jobs average 1% more than men in similar positions.[43]

In CETA's Adult Work Experience Program, women earn 90% of men's salaries in clerical positions, 85% in service occupations, and 81% in operator jobs.[44]

Currently, over 100 CETA programs are targeted specifically at women. Three of these were chosen by the U.S. Department of Labor's Women's Bureau as models for CETA prime sponsors as well as other organizations wishing to implement programs for women.

TABLE 3.6

PERCENT OF WOMEN ENROLLED AND COSTS PER ENROLLEE OF SELECTED FEDERAL EMPLOYMENT AND TRAINING PROGRAMS

Program	Fiscal Year 1976		Fiscal Year 1975	
	Dollar cost per enrollee	Percent Female	Dollar cost per enrollee	Percent Female
CETA Title I	1,256	46	1,233	46
CETA Title II	2,175	36	5,758	35
CETA Title VI	3,906	35	4,781	29
CETA Title III				
Migrants and Farm Workers	NA	42	1,128	NA
Native Americans	963	48	905	NA
Summer Youth	595	45	543	44
CETA Title IV				
Job Corps	4,156	28	3,420	25
Community Service Employment for Older Americans	6,943	50	1,919	50
WIN	3,287	73	2,679	75

SOURCE: Lorraine Underwood, Women in Federal Employment Programs, Washington, D.C.: The Urban Institute (1979) Table 3, p. 9.

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"Non-Traditional Occupations" (NTO) in Boston provides a 16-week training program in building maintenance skills relevant to such fields as carpentry, plastering, welding, and machine tool work. The course includes work experience, counseling, and trade-related physical fitness training. Over half the trainees are heads of households, with an average age of 30 and educational attainment ranging from 7th grade to masters' degree. Half are white, a third are black, and the rest are from other minority groups. In its first grant period, NTO placed 85% of its clients at an average wage of $4.43/hour.[45]

In Fort Lauderdale, "Women's Freedom of Career Choice" offers a 40-hour workshop where participants choose a career and design a training program. Three-quarters of them, randomly selected for research purposes, then receive vouchers covering a portion of their choice of classroom training, OJT, or PSE. Supportive services such as child care and transportation are also subsidized by voucher. The other 25% of workshop attendees are referred to regular Title I services to act as a control group. A major outcome of the workshop seems to be increased commitment and motivation to persevere in the workforce. Even control group women, who received no voucher, reported heightened motivation as a result of the workshop.[46]

"Better Jobs for Women" (BJW) in Denver uses outreach techniques to locate women for placement in unsubsidized apprenticeships or other OJT programs in skilled trades. Funded under CETA Title III (which will be discussed in greater detail under "Division of National Programs on p. 64), BJW has placed over 400 women in 50 different skilled occupations in its first six years of operation. The program makes a point of orienting women to all features of various trades, including such

negative aspects as isolation, ridicule, and other emotional hardships faced by women entering traditionally male fields.

BJW provides limited monetary assistance for supportive services and materials purchase. It does not offer extensive counseling or follow-up, focusing instead on its contract commitment to place 100 women per year in skilled occupations. In its 1976-77 contract year, BJW's 99 placements followed approximately the same ethnic/racial distribution as the Boston NTO program, with a starting wage average of $4.28/hour.[47]

In 1978 Congress specified displaced homemakers as a target group under CETA Title VI. Further, the 1978 CETA amendments state that programs must "contribute to occupational development, upward mobility; development of new careers, and overcoming sex stereotyping" (Title I, Part B, Sec. 121). New funding is specifically attached only to programs for displaced homemakers.

Apprenticeship and On-The-Job Training

The Bureau of Apprenticeship and Training (BAT) of the U.S. Department of Labor administers laws and regulations relevant to apprenticeship training. It promulgates standards with which apprenticeship programs must comply if they wish to be registered. Registered apprentices are eligible for certain government benefits, similar to veterans; also, registration with BAT or an equivalent state agency is necessary to permit contractors to pay apprentices less than journeyman's wages on projects covered by the Davis-Bacon Act and other wage laws in effect. In addition to setting program standards, the BAT also inserts training requirements into some publicly-financed construction projects. Within

these federal guidelines, most apprenticeship training is administered at the local level.

Among the standards set forth by the BAT is the requirement for equal employment opportunity in apprenticeships. Currently women comprise slightly over 3% of entering apprentices in the U.S., and most of them are concentrated in lower-paying cosmetology fields; however, women are apprenticed in about 200 of the 450 occupations recognized as apprenticeable by DOL.[48] The BAT recently set a goal of 25% women in apprenticeship by 1985.[49]

Women's participation in trades which offer the most apprenticeship opportunities -- carpentry, plumbing, and electrical -- has increased only slightly in recent years. The BAT attributes this lack of change to the following factors:[50]

--Sex Discrimination. Sex-role stereotypes, and myths about their physical and mental abilities, workforce commitment, family responsibilities and income needs have limited women's options largely to traditionally female jobs.

--Education. Often as a result of sex discrimination, women aren't adequately prepared in math and science, vocational training and counseling, and exposure to job-seeking networks for skilled trades.

--Age. Apprenticeship programs are traditionally designed to serve persons aged 18-24, and these programs aren't covered by the Age Discrimination in Employment Act of 1967. By the time many women realize that skilled trades offer what they want, they are too old to apply.

--Marital/Family Status. Flexible day care arrangements are necessary, and elusive, for mothers working the varied hours of construction and manufacturing trades.

--Entry Process. Applicants for apprenticeship are interviewed orally by a few members of the committee operating the program. Often this procedure is not conducive to the female applicant's free expression of her interest, nor to the committee's understanding of the relevance of her past experience to future apprenticeship performance. Also, applicants are frequently ranked according to courses they have taken in areas like math and shop, written exam scores, and oral interview. Here, women who have been unable to take "male" vocational courses and hold historically "male" jobs lack the credentials on which rank points are based.

--Worksite. The dearth of women on the worksite means there is no support system for the few women present. Consequently, problems of resentment or harrassment by peers or supervisors have no informal channels for solution.

--Physical Strength. Women need training in physical fitness and techniques for handling heavy objects to compete successfully in certain trades.

--Transportation. Women may not have priority use of the family car, and they have more difficulty getting loans for a car to reach remote worksites not on public transportation lines.

The Department of Labor issued regulations effective June 12, 1978, requiring registered apprenticeship programs to adopt affirmative action plans which include recruitment of women, dissemination of information about the programs, use of applicants from preparatory trade training

programs, and waiver of maximum age requirements. In addition, women are to comprise 7% of the workforce on some federally financed construction projects. The BAT is pursuing a publicity campaign directed at women. A joint Women's Bureau - BAT Coordinating Committee has been formed for the purpose of increasing apprenticeship opportunities for women. Further, the BAT has enlisted the 450 CETA prime sponsors to design their programs to prepare women and encourage employers to bring women into skilled trades via apprenticeship.[51]

Division of National Programs, Employment and Training Administration

Title III of CETA includes a provision for categorical federal funding to programs for special target groups, including youth, older workers, offenders, and other disadvantaged groups as determined by the Secretary of Labor. These programs are administered within two offices of the Employment and Training Administration -- the Office of Youth Programs and the Division of National Programs (DNP). The DNP contracts for training programs and related services with labor unions, business associations, corporations, national education and training agencies, and community-based organizations. The Women's Work Force, a project of Wider Opportunities for Women, Inc. (WOW), has reviewed DNP programs extensively,[52] and the major points of that review are included here.

The DNP has five broad component programs. These, with their FY 78 funding levels, are as follows:[53]

Apprenticeship Outreach Program	$19.8 million
Journeyman Outreach and Training Program	2.3 million
National On-the-Job Training	23.1 million
Promotion and Development	26.7 million
Program for Operational Support to Community-Based Organizations	10.6 million

The Apprenticeship Outreach Program (AOP) recruits, refers, and places mostly minority persons as apprentices in skilled occupations. In 1978, it had a budget of $19,824,000 for 23 contracts, of which only four were programs for women. The largest of these was the Minority Women's Employment Program (MWEP), funded at $648,000. The four programs together represented 4.6% of AOP's 1978 dollars.[54]

The DNP reported that 19% of 1977 placements in AOP programs were women. However, from July 1976 through June 1977, only 11% of female AOP placements were in skilled trades. The remaining 89% were placed in jobs which by definition paid less than $4/hour.[55]

Of AOP's 22 contracts in FY 77 (MWEP was new to AOP in 1978), 12 served fewer than 10% women, 4 fewer than 5%, and 2 served no women.[56]

The Journeyman Outreach Training Program, which recruits, trains, and places persons usually facing age-related obstacles to training, has only one sponsor -- the National Ironworkers and Employers Training Program. In FY 77, NIETP made 471 placements, of which none were women.[57]

The National On-the-Job Training Program (NAT-OJT) provides OJT as well as classroom instruction for unemployed and underemployed people in skilled and semi-skilled occupations. Programs are operated by labor unions, trade association employers, and special interest organizations.

In FY 78, NAT-OJT awarded 27 contracts for a total of $23,069,000. Only one, to the Graphic Arts International Union, was specifically directed to women, and its budget is approximately 1% of the NAT-OJT FY 78 dollars.

Women's placement rate in FY 77 for all NAT-OJT programs was 18%. However, only 2.7% of that total were construction trade placements. Further, of the 21 contracts in FY 77, 10 served fewer than 10% women, and 7 served fewer than 5% women.[58]

The Promotion and Development Program (P & D) is made up of a number of projects aimed at improving "understanding and acceptance of national employment and training priorities and policies," in order to "foster the active involvement of a given segment of the community in the federal employment and training effort."[59] Total funding for P & D was $26,714,000 in FY 78.

The Women's Work Force of WOW reports that their talks with the largest contractor, the National Alliance of Business, "have made it clear to us that serving women's employment needs is not an official priority."[59] The second largest contractor, Human Resources Development Institute, has targeted no special monies for women's programs, though they do include women in their stated constituency. The Women's Work Force further states, "We have been unable to determine from available ETA information how women's employment needs are addressed under these programs, or, in fact, what the general funding guidelines are for P & D programs."[60]

The fifth major component of DNP is the Program for Operational Support to Community-Based Organizations (CBO), which gives money to national CBO offices to provide programmatic assistance to its CETA-funded affiliates and encourages additional labor force funding from state and local prime sponsors. Thus, these monies fund providers rather than programs per se.

In addition to these ongoing DNP segments, a special program was

funded under Title III in 1977 for a single year. Called the National Program for Selected Population Segments (NPSPS), it divided $20 million among the 10 ETA regions for employment and training services to women, rural workers, youth, ex-offenders, older workers, and the handicapped. After a year's seed money, successful projects had to attempt inclusion in a prime sponsor's ongoing services.

The 26 women's programs generally focused on training in non-traditional fields -- trades, sales, and repair/maintenance. Only 8 (31%) of these programs were refunded. Only the ex-offender group, at 14%, had a lower rate of project refunding.[61]

Overall, the Women's Work Force concluded that "DNP appears to have no formal, comprehensive affirmative action policy regarding women for existing contracts." Only four out of some 50 DNP contracts have been programs specifically for women, accounting for 1.4% of DNP's FY 78 budget. The percentage of women trained and placed is low across all DNP-funded programs, and most women are placed in traditional jobs requiring limited skill and offering low pay. The report adds, "The record so far clearly shows that the specialized women's programs have best served women by their successful and precedent-setting placement of women in skilled jobs and apprenticeships with high earnings potential -- and at a cost lower than the average cost per placement in other programs."[62]

Work Incentive Program (WIN)

The Work Incentive Program is authorized under the Social Security Act. Targeted at recipients of Aid to Families with Dependent Children (AFDC), it provides job referrals and job-seeking skills, with emphasis on quick employment and a de-emphasis on training. All welfare

recipients are required to register for WIN unless they meet one of the exclusion criteria (e.g., disability or preschool-age child).

In addition to job-finding help, the WIN programs may offer child care up to 30 days after start of employment (this can be extended up to 60 days at the discretion of the state welfare staff), health and homemaker services, family counseling, family planning, and medical rehabilitation services. However, the extent of these supportive services appears to be decreasing. In 1974, one-third of 78 sample WIN sites allowed child care to be provided during any WIN activity. By 1975, less than one-fifth did so. At the same time, the percentage of sites providing child care exclusively during employment rose from 31% to 38%, with an additional one-third of sites extending child care for orientation, job search, education, or work experience components. Likewise, 51% of sites provided transportation assistance through all WIN activities in 1974, but only 44% did so in 1975.[63]

The percentages of WIN participants who were male, white, high school graduates, and unemployed less than a year were each greater than their proportions in the overall AFDC population.[64] These characteristics are all associated with higher employment rates, and their overrepresentation reflects the "creaming" criteria which are an explicit goal of the WIN program.

WIN favors male family heads in its service priorities. The initial emphasis on unemployed fathers was worded in DOL regulations. After a legal challenge by two wait-listed women, a federal court invalidated the male priority in 1971, but at the same time, Congress, in the form of the Talmadge Amendments, enacted a more explicit priority for men. It was these amendments which shifted the WIN emphasis from

training to quick job placement and which required welfare mothers of school-age children to work. Unemployed fathers were given first priority for placement, followed by mothers and over-16 relatives.

Thus, in FY 76 female family heads were 90% of the WIN target population, 73% of participants, 65% of jobfinders, and only 47% of those able to leave the welfare rolls consequent to finding employment.[65]

In FY 75, the average hourly starting wage for female WIN participants was $2.42, compared to $2.94 for male participants. Fifteen percent of the women (44% of the men) earned $3.00 or more per hour, while 3.1% of the women (14+% of the men) earned at least $4.00 per hour.[66] In FY 77 nearly 75% of the women entered jobs paying less than $3.00/hour, while almost 63% of the men earned at least that much.[67] The average hourly entry wage was $3.70 for men, $2.73 for women, a differential that is eight percentage points greater than the 1975 gap.[68] The women's jobs were concentrated in clerical, sales, service, and benchwork occupations, while the men tended to get jobs in the trades and structural work.

As is the case with CETA, then, women are underrepresented among the WIN participant population compared to their proportion in the eligible AFDC population. This could be because more women than men on AFDC meet exclusion criteria, such as having a child under age six, but the reported data are insufficient to determine whether this is the case. It is unlikely, however, that legitimate exclusion accounts for all the differential, since program resources are less than client needs, resulting in a biased selection process whereby the most "employable" clients are served first. (WIN requires 1.5 million persons per year to seek work but can only provide services to 22% of them, employment to 9%, and

a training or PSE position to 7%.[69] The WIN program outcomes are also less favorable for women than men, as women tend to become employed in lower-paying occupational fields.

As Lorraine Underwood points out, "the issue of sex discrimination in WIN is complex because AFDC discriminates against male family heads in several ways."[70] Men who head intact families are ineligible for AFDC in 24 states, whereas female family heads are eligible in all states. Male-headed families lose all AFDC benefits if the father works more than 100 hours per month, no matter what his earnings are. Female family heads can receive an income disregard. "The result," notes Underwood, "is that men must find jobs that pay more than the value of welfare benefits plus the costs of employment, but female heads can take lower paying jobs without risking the loss of all benefits."[71] Since WIN regulations state that, if no income disregard applies to a participant, he cannot be required to accept a job paying less than AFDC benefits plus employment costs, more effort is put into placing men in higher-paying jobs, with less concern for women's earnings.[72]

Vocational Education

Federally supported vocational education programs are designed and run by individual states, with approval and monitoring by the Education Division of HEW to ensure compliance with federal funding requirements. As noted previously (see Table 1.3), patterns of participation in vocational education are markedly different for men and women, with women concentrated in traditionally female clerical and consumer/homemaking programs while men take trade-related courses.

As a result of the Education Amendments of 1976, a number of

programs targeted at remedying this imbalance have been initiated. These amendments include explicit requirements for activities designed to eliminate sex bias, stereotyping, and discrimination in federally funded vocational education programs. Each state must employ a full-time sex equity coordinator for vocational education, and states must include in their plans programs for displaced homemakers and innovative programs to reduce sex bias and stereotyping. Consumer and homemaking programs must encourage participation by men as well as women. Further, all research and demonstration programs are to show attention to sex equity issues.

In addition to these mandates, the amendments allow programs to provide support services for women, counseling on changes in women's work patterns, and grants to reduce sex-based inequities.

It is early yet to estimate the effect the 1976 amendments will have. However, the National Coalition of Women and Girls in Education has stated that

> many states have been reluctant to implement the law. They've ignored requirements for representation of women on advisory councils; provided little support for their sex equity coordinators; submitted state plans which dealt inadequately, if at all, with the causes of sex discrimination or the denial of services based on sex, and designated few if any federal or state funds for projects to overcome sex bias and stereotyping.[73]

On the federal level, the Coalition charged that, "The U.S. Office of Education has taken a conservative posture on enforcement of the 1976 amendments, consistently approving state plans that barely comply with the law."[74]

While compliance with the amendments may not yet have attained hoped-for levels, a number of sex equity programs in vocational education

have sprung up since 1976. Serving predominantly, but not exclusively, women, most of these new initiatives feature educational and vocational counseling, information and referral, and workshops and classes (e.g., on assertiveness, job-finding skills, career choices). Some provide a liaison with public and private employers to encourage nondiscriminatory hiring practices. The focus is on clients who seek to enter the job market, upgrade their skills, or begin a second career. As such programs expand and reach greater numbers of women, the impact of the 1976 legislation may become more tangible.

Cooperative Education

While cooperative education dates back to 1906, it has only been in the past decade that these programs have greatly increased in number and have begun receiving federal support. Co-op education, a plan whereby students spend a portion of the school year in classes and the remainder in paying jobs related to their studies, was first included in the Higher Education Act in 1968 under Title III. Now, it comprises Title VIII of the Act as reauthorized in 1976.

Nationally, there are approximately 1,000 schools offering co-op programs, and they served roughly 205,000 students in 1977.* Estimates from the Cooperative Education Research Center at Northeastern University indicate that about 40% of these students were female; however, a study sponsored by the U.S. Office of Education reports a 30% female enrollment in co-op programs.[75] No analysis of the "occupational" distribution of these students was available from the Center, but its assistant director, Sylvia Brown, observed that there appeared to be no significant differences from occupational distributions in the general labor force--few women co-op students were in non-traditional courses of study/work.

*I am indebted to Sylvia Brown, Assistant Director and Research Associate of the Cooperative Education Research Center, Boston, for information she provided over the telephone. Unless otherwise noted, her data and observations inform this discussion of cooperative education.

Most cooperative education students are of traditional undergraduate age. Again, Brown estimated that about 50 co-op programs work with older adults. (These students, she noted, tend to be registered in programs not officially labeled "co-op," although they do split their time between classroom and worksite.)

Data on program outcomes broken down by sex were not available in any literature this writer could find, nor were they available from the Center in Boston. The Applied Sciences Management study found that women generally obtain greater benefit from a college education, co-op or non-co-op, than do men except in the field of business management.[76] That report also noted that a greater proportion of four-year co-op programs than two-year programs reported making an effort to recruit women.[77]

A preliminary finding from a recent study indicated that some female co-op students were more likely to move into non-traditional jobs than were non-co-op control women with the same academic majors.[78] The co-op women also married later, had fewer children, and had them later than the control women did. These differences did not achieve statistical significance but rather suggested a trend.[79]

Thus, while cooperative education is one of the oldest "nontraditional" postsecondary programs in the country, and while its activities are generally well documented, there is a great dearth of data on women students in co-op programs. Until these data are collected and reported, it is difficult to know what impact cooperative education offerings have on women.

Related Federal Legislation

In the course of describing federally supported education and training programs, certain pieces of legislation pertinent to those

programs have already been discussed. There is, however, other relevant legislation which has not resulted in ongoing programs but which contributes either to the climate or resources fostering sex equity in participation in education and training opportunities. These laws are outlined below, and, as an exemplar, the demonstration-research projects of one congressionally authorized agency are described.

Title IX, Education Amendments of 1972

This title forbids any form of sex discrimination in most federally-supported educational programs. Title IX is the broad mandate from which provisions for sex equity in more specific contexts have arisen.

Title IV, Civil Rights Act, as Amended

The 1964 Civil Rights Act contains in Title IV authorization to provide local educational agencies with technical assistance in achieving racial desegregation. In 1974, this title was expanded to include "sex desegregation." The total FY 78 appropriation for the title was $34.7 million, of which $8 million was earmarked for sex equity. These efforts are carried out through regional centers, training institutes, and limited state and local staff services.

Women's Educational Equity Act Program (WEEAP)

The Women's Educational Equity Act (WEEA) was passed by Congress in 1974. During its first four years, WEEAP has provided grants and contracts for production of model programs to achieve educational equity. Appropriations have been slim ($6-8 million per year), but projects have been targeted at every educational level from preschool to re-entry. In 1978, Congress reauthorized WEEA and added a second tier to the funding structure. That tier would provide money to assist

local school districts and other institutions in achieving sex equity and compliance with Title IX. The second tier, however, is only "triggered" when annual appropriations for WEEA exceed $15 million.

The type of replicable projects WEEAP has developed include models for:

--meeting special educational needs of particular subgroups of women;

--basic skills projects; and

--bringing women into non-traditional vocational education programs.

Activities authorized under Tier Two include, among others, implementation of models developed under Tier One, outreach programs for non-traditional courses of study, and a variety of "tailoring" activities to accomodate existing programs to special needs of subgroups of women and girls.

Fund for the Improvement of Postsecondary Education (FIPSE)

FIPSE was established by the Education Amendments of 1972 for the purpose of selecting and funding innovative pilot programs in higher education. Located administratively in HEW's Office of Education, the Fund has placed a significant portion of its limited resources behind projects designed to strengthen the linkage between education and work. Many of these projects have been programs of worker education, and a sizeable number of these have been targeted at women. Several FIPSE-supported women's projects are outlined below.

Non-traditional students. From 1974 through 1976, FIPSE put almost $1.3 million into projects "designed to help older women determine their educational goals prior to enrolling in educational programs and attain them while enrolled."[80] These programs include:

--Assistance to a small women's college in its transition from a

predominantly residential college serving traditional students to one also serving returning community women. With FIPSE's support, Barat College broadened its clientele and services to the point where over 40% of its students are over age twenty-five.

--The Regional Continuing Education for Women Program (RCEWP) in Philadelphia, a network of college offices serving adult women. Through heavy use of the media, these institutions have informed many women of educational opportunities through RCEWP. Media presentations were developed as were training seminars to sensitize college staff and faculty to concerns of adult students.

--San Jose City College's program for Chicanas, a one-year intensive academic program to ease the transition from home to school. This program was absorbed into the college budget when FIPSE support ended.

Outside counseling. FIPSE has funded two non-college-based "brokering" service projects for students.

--Regional Learning Service has created inventories of community-based educational resources, trained counselors, and set up 12-hour-a-day services targeted at five selected groups, one of which is women. Women comprise 70% of RLS' clientele. In addition to ongoing services, RLS has offered a variety of workshops on educational and career concerns.

--Women's Inner City Educational Resources utilizes, as staff, women from the urban Boston community who help other, mostly urban black women develop and work toward their educational and career goals. This program served over 1000 women from 1973-1976 with information on career options, counseling, institutional advocacy, skill development, and temporary child care, to name a few offerings. It has also worked with

local colleges on creating new programs for occupational mobility for minority women.

Besides brokering services, FIPSE has funded a two-year career counseling project for women clerical workers. Conducted by the National Commission of Working Women, this project has utilized working women's groups in six cities to "assist and motivate women clerical workers to evaluate their jobs and personal skills, explore other career options within their companies or industries, validate their individual aspirations, and acquire the education and/or training necessary to achieve desired occupational mobility," as stated in the grant proposal.

The local working women's groups have developed career workshops and publicized them to women clerical workers. They have also developed curricula for industry seminars aimed at increasing occupational awareness on the part of the workers and corporate, union, and educational leadership of the problems, needs, and aspirations of working women. Efforts in all six cities have received a wide and enthusiastic response from the target population of women.

Meshing school and job needs. Several FIPSE grants have supported efforts to straighten the oft-winding path between education and jobs for women. Two noteworthy efforts are described below.

--Northeastern University is working with major Boston employers to create 60 career modules based on skills deemed requisite for predicted job vacancies. Women participating include college and noncollege graduates, unemployed women, and employed women desiring skill upgrading.

--The National Council of Negro Women has implemented a program of cooperation between community groups and educational institutions to

improve career opportunities for, in this case, mature black women in low-paying jobs. A 60-hour Associate of Arts degree from Pace University has been designed to move women into management, sales, and administrative jobs. NCNW serves as a link between Pace and the 35 participating employers; these three groups jointly developed curricula reflecting required job competencies. The program was institutionalized by Pace in 1978.

FIPSE has funded a number of other projects focused on women's educational needs, including women's studies materials development, non-sexist educational models, and life-experience credits. They have also supported worker education programs not specifically directed at women, but which address issues of sex equity.

Labor Union Initiatives in Worker Education and Training

Trade unions have been in the forefront of efforts to provide working adults access to education and training. The bulk of union initiatives, aside from apprenticeship, fall into two categories. The first is the negotiated tuition aid benefit, and the second is the development and administration of labor studies programs, often in conjunction with educational institutions.

Tuition Aid

Briefly, the negotiated tuition aid benefit is the result of collective bargaining whereby the employer agrees to pay all or part of tuition costs for employees who wish to pursue given educational objectives. Virtually all tuition aid plans render this payment in the form of reimbursement to the employee. Plans vary in their coverage;

some have stringent requirements that the courses taken be directly job-related; others allow a wide latitude of choice. Courses might be on or off company and/or union sites. Most plans cover about 80% of tuition costs.[81] Some employers offer educational leave (hours off work) or leave of absence (an extended time period). While tuition costs may be partially or fully covered by the employer under leave provisions, the leave itself is generally not paid. Such paid release-time provisions are virtually nonexistent in most U.S. tuition aid agreements.

In a report of a recent broad-based survey of tuition aid plans and users, the National Manpower Institute (NMI) has estimated that there are currently 198 negotiated tuition aid plans covering 1,600,000 workers in this country.[82] Studies of participation in these plans have reported average utilization rates ranging from 4.4%[83] to 10%[84]. These are low rates of participation, and the rates for women are lower than those for men. In the overwhelming proportion of tuition aid plans, women's participation rates fall below 10%.[85] The National Manpower Institute survey found that 29.5% of the 910 respondents had used their tuition aid benefit in the previous two years.[86] (The participation figures in the NMI report are not broken down by sex; the survey sample of workers was 82.4% male.)

In the most in-depth study to date of male and female underutilization of tuition aid, Mimi Abramovitz surveyed workers in three large companies offering tuition aid benefits. Only female workers were studied in one of the firms. Across all three companies, 16% of the women reported ever having used tuition aid, while the men surveyed had almost a 40% utilization rate.[87] While in all categories investigated

women used tuition aid less than men did, Abramovitz found a number of factors associated with use and non-use.

Income. Workers earning higher wages had higher utilization rates than those with lower wages, regardless of sex (see Table 3.7).

Educational attainment. Workers with higher educational attainment levels used tuition aid more frequently than did those with a high school education or less. For men, this association was linear at the levels examined, while women's participation decreased with the attainment of a college degree (see Table 3.8).

Skill level. High-skilled workers had higher utilization rates than did semi-skilled and low-skilled workers, regardless of sex (see Table 3.9). Skill level was a better predictor of utilization than occupational group (white or blue collar) (see Table 3.10).

Age. Age had a different relationship to men's participation rates than to women's rates (see Table 3.11). Men's participation jumped significantly from the 18-34 bracket to the 35-44 bracket, while women's utilization remained fairly constant. After age 45, men's rates went down by nearly half, as did women's rates.

Race was a factor with only minimal impact -- sex was a bigger determinant of participation than race. Among the women there was almost no difference in utilization by race, while a slightly higher percentage of white than black men used tuition aid. Regardless of race, more men than women participated.[88]

Family structure did not appear to differentiate women users from

TABLE 3.7

MALE AND FEMALE TUITION AID USERS BY GROSS WEEKLY PAY (in percents*)

Gross Weekly Pay	Male % Users	Female % Users	Total % Users
$200 or less	27.1	4.1	15.3
$201 - $260	21.9	13.7	17.1
$261 - $380	48.3	38.5	47.5
$380 or more	55.3	38.9	52.1

*Percents based on number of respondents answering the question.

SOURCE: Mimi Abramovitz, Where Are The Women? (New York: Institute for Education and Research on Women and Work, New York State School of Industrial and Labor Relations, Cornell University, 1977). Table 61.2, p. 89.

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TABLE 3.8

MALE AND FEMALE TUITION AID USERS BY EDUCATIONAL LEVEL (in percents*)

Educational Level	Male % Users	Female % Users	Total % Users
High school or less	6.5	5.3	5.8
Some college	47.7	38.0	45.7
College degree	59.1	25.5	48.7

*Percent based on number of respondents answering the question.

SOURCE: Mimi Abramovitz, Where Are The Women? (New York: Institute for Education and Research on Women and Work, New York State School of Industrial and Labor Relations, Cornell University, 1977), Table 6.9, p. 82.

TABLE 3.9

MALE AND FEMALE TUITION AID USERS BY SKILL LEVEL (in percents*)

Skill Level	Male % Users	Female % Users	Total % Users
High Skilled	45.9	31.6	45.1
Semi-Skilled	38.2	13.9	23.4
Low Skilled	13.3	0.0	12.5

*Percents based on number of respondents answering the question.

SOURCE: Mimi Abramovitz, Where Are The Women? (New York: Institute for Education and Research on Women and Work, New York State School of Industrial and Labor Relations, Cornell University, 1977), Table 6.13, p. 90.

TABLE 3.10

MALE AND FEMALE TUITION AID USERS BY OCCUPATION GROUP (in percents*)

Occupation Group	Male % Users	Female % Users	Total % Users
White-Collar	46.7	15.0	32.3
Blue-Collar	30.0	22.2	29.3

*Percents based on number of respondents answering the question.

SOURCE: Mimi Abramovitz, Where Are The Women? (New York: Institute for Education and Research on Women and Work, New York State School of Industrial and Labor Relations, Cornell University, 1977), Table 6.14, p. 91.

NOTE: In this study, proportionately more white-collar than blue-collar men were highly skilled. The reverse is true for women. Thus, what appears to be a sex difference in usage by occupation group is more accurately described as a difference by level of skill.

TABLE 3.11

MALE AND FEMALE TUITION AID USERS BY AGE OF WORKER (in percents *)

Age	Male % Users	Female % Users	Total % Users
18-34	39.6	19.7	31.9
35-44	60.3	17.5	39.7
45 or older	33.3	9.6	26.6

*Percents based on number of respondents answering the question.

SOURCE: Mimi Abramovitz, Where Are The Women? (New York: Institute for Education and Research on Women and Work, New York State School of Industrial and Labor Relations, Cornell University, 1977), Table 6.8, p. 80.

non-users to any significant degree, but men's participation rate increased with additional family responsibilities, reflecting the increased pressure of the breadwinner role (see Table 3.12).

The common denominator among earnings, education, and skill level is their relationship to worker status and position in the workplace hierarchy, Abramovitz points out.[89] Workers with higher work status, who hold more favorable positions in the workplace hierarchy, are much more likely to use tuition aid. Women of all income, education, and skill levels utilized tuition aid less than men at their same levels, but within either sex, the status/hierarchy distinctions held. Since there is a large gap between male and female earnings, and since more women than men have had no college experience, and since women are less likely to be in high-skilled jobs than are men, their positions are less favorable in the worker hierarchy, and they have lower worker status than men. Thus, while some sex difference in tuition aid utilization obtains, a greater portion of the difference between men's and women's participation rates is more a <u>class</u> difference than a sex difference.

Both the Abramovitz and NMI studies examined barriers to tuition aid use for non-users. While Abramovitz defined "barrier" as a difficulty reported by workers, NMI divided the reported difficulties into "problem" and "barrier" categories. A "problem" is a difficulty reported by approximately equal proportions of tuition aid users and non-users; a "barrier" is a difficulty reported by more non-users than users. Again, the NMI report does not break down its data by sex.

The barriers reported by Abramovitz, in addition to showing some variation by sex, also varied in their relative importance by company (e.g., by work structures and type of tuition aid plan offered). While

TABLE 3.12

MALE AND FEMALE TUITION AID USERS BY
FAMILY STRUCTURE CHARACTERISTICS
(in percent*)

Family structure characteristics	Male % Users	Female % Users	Total % Users
Marital Status:			
Single	25.9	22.1	24.4
Married	43.0	12.5	34.5
Separated, Widowed, Divorced	46.6	17.5	27.1
Number of Children:			
None	31.1	20.1	25.9
One	43.4	14.6	32.3
Two	48.3	7.8	37.9
Three	40.2	8.0	32.4
Four or More	38.1	7.7	32.9
Age of Children:			
Pre-school	54.2	14.3	47.0
School Age Only	55.7	15.0	40.9
Over 18 only	33.3	10.2	26.4

*Percents based on number of respondents answering the question.

SOURCE: Mimi Abramovitz, Where Are The Women? (New York: Institute for Education and Research on Women and Work, New York State School of Industrial and Labor Relations, Cornell University, 1977), Table 6.16, p. 96.

it was not viewed as a barrier by the NMI investigators. Again, though, it should be noted that the NMI sample is overwhelmingly male, and Abramovitz found family responsibilities to be positively correlated with participation in education for male workers, and somewhat negatively correlated with participation for female workers.

Finally, financial considerations also appeared as a problem, but not a barrier, in the NMI sample.

Program barriers. This category of obstacles refers to features of the tuition aid program that act as disincentives to participation. The two most frequently names program barriers in the Abramovitz study were requirements that the courses be job-related and the need for advance payment of tuition. These factors were ranked differently in the three companies examined, reflecting variation in the tuition aid programs.

Abramovitz found, not surprisingly, that lack of information about the tuition aid plan was cited most often by workers at the company giving the least publicity to its plan. Here, more women than men said lack of information was a barrier. Generally, workers with low worker status were more likely to lack information on the program than high-status workers (those over age 35 with a college degree). This was even more true for workers who also held unfavorable positions in the workplace hierarchy--low-skilled, low-paid and blue-collar workers ranked lack of information as one of their top three program barriers.

Likewise, the two structural barriers to participation in education found by the NMI researchers were inadequate information on the program and inadequate counseling. All surveyed workers were covered by a tuition aid plan, yet about one-third did not or were not sure of their own eligibility or of the approval process. Though less powerful

such inter-company differences are important, the present summary of utilization obstacles will focus primarily on differences, or lack of them, between sexes.

Barriers stemming from personal or family considerations. The three top-ranked personal barriers reported by men and women in the Abramovitz sample were costs, preference for other activities, and fear of returning to school. There was little difference between men and women in proportions citing costs and other activities as barriers (about one-third of each), but more women than men cited fear as a barrier. Fear seemed to be a more prevalent obstacle among women over age 45 with no college education.

Preference for time with family was also named about equally often by men and women. Child care was mentioned by 13% of the women respondents and 4% of the men. Finally, travel problems (i.e., safety in traveling alone at night) were a barrier for considerably more women (27%) than men (8%).

Among non-users of tuition aid, 26% of the men and 15% of the women reported no personal barriers to tuition aid use.[90]

Similarly, the NMI study found the belief that one was "too old" to go to school acting as a barrier to tuition aid use. A second barrier was the lack of desire to take more courses. Like the Abramovitz data, the NMI data show age and educational level serving as barriers; workers with some postsecondary educational experience, and workers aged 34 or under, were more likely than less educated, older workers to be tuition aid utilizers.

While family responsibilities were defined as a problem by the NMI sample, equal numbers of users and non-users cited this difficulty, so

it was not viewed as a barrier by the NMI investigators. Again, though, it should be noted that the NMI sample is overwhelmingly male, and Abramovitz found family responsibilities to be positively correlated with participation in education for male workers, and somewhat negatively correlated with participation for female workers.

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Likewise, the two structural barriers to participation in education found by the NMI researchers were inadequate information on the program and inadequate counseling. All surveyed workers were covered by a tuition aid plan, yet about one-third did not know or were not sure of

their own eligibility or of the approval process. Though less powerful differentiators, the report of "too much company red tape," as well as inadequate information on available courses, separated tuition aid users from non-users.

The NMI study found concomitantly that companies and unions did little to publicize their tuition aid plans, relying mainly on bulletin board notices or articles in the company paper at least once a year. Rarely were handbooks, pamphlets, or meetings used for dissemination purposes.

Money-related problems (advance payment requirement, insufficient cost coverage by the program) were named as barriers by more men than women in the Abramovitz study. These barriers are associated with the role of family support--among the group of women containing the greatest proportion of sole family supporters, insufficient coverage of tuition costs was the leading program barrier. Thus, women who are sole breadwinners cite financial barriers as frequently as do men.

However, 43% of the men and 50% of the women non-users said no program factors created obstacles to their participation in tuition aid.

Education-related barriers. Unlike personal and program barriers, in which inter-company differences were key factors, education barriers were similar across company lines in the Abramovitz study. More variation was found between sexes than among companies. For men, the top-ranked barrier was the belief that no benefit would accrue from further education, while the primary obstacle for women was uncertainty about their educational interests and goals. Persons citing "uncertainty" were more likely to be between 18 and 34, single, semi-skilled, less educated, low-paid,

white collar, and female. Those mentioning "no benefit" were primarily over 45, married, high-skilled, higher-paid, more educated, blue-collar, and male. These characteristics are consistent with the previously noted NMI findings regarding education level, age, and participation in further education.

In part, the disparity between men and women believing no benefit would result from education is based in observable reality, in that men are more likely to secure job gains without further education; also, in one company, 88% of the respondents over age 45 were male, many near retirement age, and thus not likely to obtain employment gains from additional education. Here, the effects of sex are confounded with those of age. Beyond these factors, however, Abramovitz found that women were more optimistic than men about opportunities for advancement, and about their own chances of advancing. The women were more likely than the men to see education as productive of job related gains.

Among Abramovitz's non-user sample, 38% of the men and 37% of the women reported no education related barrier to tuition aid use.[92]

Work related barriers. Abramovitz found that the three top-ranking work related barriers to tuition aid utilization were fatigue, work schedules, and the belief that education would not help on the job. Overall, 43% of her non-users cited "education won't help" as the single most important reason for their non-participation. In the NMI study, as well, nearly 43% of the surveyed workers indicated they didn't expect job gains to result from further education.

As [redacted] would expect, company characteristics were key determinants of work related barriers in Abramovitz's investigation. In one company, "fatigue" was named by more women than men, but not in the other two.

The reverse was true for "work schedules." Thus, worksite and sex operate together in determining work related barriers to participation. Again, though, 47% of men and 42% of women in the Abramovitz sample said that work factors posed no obstacle to tuition aid use.[93]

Thus, in all areas but "educational" barriers, interfirm differences dominate gender as factors in the barriers cited. Family role divisions, personal safety, and sex role socialization are key factors in clear-cut sex differences in reported barriers.

Gloria Johnson, Director of Educational and Women's Activities for the International Union of Electrical, Radio and Machine Workers (whose membership is 38% female) cited, from among a number of reasons, four outstanding factors in women's underutilization of tuition aid benefits:

--"Total lack of time" for education, particularly for women with small children.

--Lack of internal publicity about the program. A number of other collective bargaining provisions, such as wage increases and promotion structures, are of higher priority for union members than are educational benefits.

--Money. Many women cannot afford to wait for tuition reimbursement, and most tuition aid programs don't provide "up-front" money.

--Sex stereotyping on the part of women and men. "'Women Not Wanted' doesn't end when the barrier is removed," said Johnson, noting that male resistance at the worksite, while decreasing, has not yet disappeared. For their part, she stated, women are in unfamiliar territory. "Women haven't been where education will put them."

Money, family responsibilities, uncertainty about goals and interests, lack of information on programs, fear of returning to school, and time difficulties are significant barriers for female non-users, as well as for a non-trivial number of males. As Abramovitz notes, an interesting and worthwile direction for future research would be the study of how women who do utilize tuition aid are able to surmount these obstacles.

Current research, however, reveals the extent to which employers do not perceive these barriers to tuition aid utilization. The NMI tuition aid study, besides surveying workers, queried company and union officials regarding barriers to workers' use of their tuition aid benefit. Of 20 barriers mentioned, only one was viewed by over half of the company officials as actually creating an obstacle to participation. That barrier was "low worker interest," cited by 70.6% of company officials as a significant barrier to further education. In contrast, seven barriers were cited by over half of the union officials, and only two of the 20 were perceived as a barrier by less than 25% of the union officials. Thus, the company officials focused on low worker interest in education, while union officials, though recognizing low worker interest as a problem, put greater emphasis on structural barriers.

While these reported barriers can be helpful to program planners because they are relatively specific, perhaps the most telling explanation for underutilization of tuition aid plans lies in the perceived outcomes of utilization. Table 3.13 shows workers' reasons for using tuition aid, and Table 3.14 indicates the reported effects of its utilization, as found by Abramovitz.

A look at the reported reasons for use reveals that men and women are both primarily interested in job-related gains. In addition, more women than men use education for personal development. The outcome figures, however, show great disparity between job-related goals and their attainment for both sexes. The disparity is greater for women, especially in the areas of promotion and skills improvement. The fact that approximately one-third of male and female respondents saw no significant effect from using tuition aid is particularly salient.

TABLE 3.13

PERCENTAGE OF MALE AND FEMALE TUITION AID PARTICIPANTS, BY REASON FOR PARTICIPATION

Reason for Participation	Percentage of Men Citing Reason	Percentage of Women Citing Reason
Upgrading/Promotion	55.0	55.0
Academic Degree	47.9	38.3
More Money	43.4	24.4
Improve Skills for Present Job	38.9	46.9
Personal Development	32.5	55.1
Change Occupation	21.7	22.4

(Since participants cited more than one reason, percentages do not add to 100.)

SOURCE: Mimi Abramovitz, Where Are The Women? (New York: Institute for Education and Research on Women & Work, New York State School of Industrial and Labor Relations, Cornell University, 1977), Table 8.3, p. 157.

TABLE 3.14

PERCENTAGE OF MALE AND FEMALE TUITION AID PARTICIPANTS, BY REPORTED EFFECTS OF TUITION AID UTILIZATION

Reported Effect	Percentage of Men Citing Effect	Percentage of Women Citing Effect
Personal Development	32.9	34.7
Upgraded/Promoted	29.6	14.3
Improved Skills	26.8	18.4
Pursued More Education	24.4	30.6
No Significant Effect	30.2	34.7

(Since participants cited more than one effect, percentages do not add to 100.)

SOURCE: Mimi Abramovitz, Where Are The Women? (New York: Institute for Education and Research on Women & Work, New York State School of Industrial and Labor Relations, Cornell University, 1977), Table 8.6, p. 164.

Perhaps it helps to explain the "dropout" effect observable in the lower percentage of users pursuing more education than stating "degree" as as a goal.

Given that their goals appear generally not to be met, the previously mentioned optimism of the women in the sample concerning their opportunities for advancement seems remarkable. This positive outlook can also be seen in Tables 3.13 and 3.14; there is a 23 percentage point gap between men stating "degree" as a goal and those engaging in further education after using tuition aid, but the gap is only 8 points for women. The opportunities for advancement are fewer than the women appear to believe, although education may improve individual chances.

Overall, those who don't utilize tuition aid far outnumber those who do, particularly among women. Many of Abramovitz's non-users report no personal, programmatic, educational, or work-related barriers to participation. In addition, the majority of the NMI sample stated that education is important for many reasons: job performance, personal enrichment, and citizenship, to name a few. Yet, for 43% of Abramovitz's non-users, the belief that no benefit would result from further education was the single most important reason for nonparticipation. And while this was not a barrier for the NMI sample, still, nearly 43% felt that more education would not lead to job gains. Given the above findings, the choice not to utilize tuition aid might well derive from a rational assessment of likely gains from additional education.

Labor Studies Programs

> Worker education for women is a surrogate for the kind of competence that men have been able to acquire on the job. . . . Leadership roles have come to men because they have learned how to be leaders through practice and experience. Because women do not view themselves as leaders, labor education has the challenge and the opportunity to help fill some of the gaps in their experience.
>
> —From summary of comments of Anne Nelson, Associate Director of Cornell University's Trade Union Women's Studies, at "Focus on Women Unionists," November 14, 1974.

In 1976, about 11% of working women belonged to trade unions, comprising 24.9% of total union membership.[94] Nonetheless, women's representation in elected and appointed union offices at all levels has been considerably less than their proportion of membership would indicate.[95]

Membership and activity in labor unions is related to participation in worker education in that both union members and worker-students are utilizing their respective institutions primarily in an effort to achieve job-related gains. Thus, labor studies programs, which teach union-related subjects and leadership skills, are providing individuals with tools they can use to enhance not only their own job status, but that of other union members as well through organization and collective bargaining.

Many trade unions now offer programs of labor education, and some of these have special departments or divisions concerned with leadership training for women unionists. In addition, approximately 25 universities provide labor education services to unions in their states, usually subsidized in part by state or university revenues. At least 30 colleges and universities have a labor studies department, such as the Labor Education Center at Rutgers University and the New York State School of

Industrial and Labor Relations (which houses the Trade Union Women's Studies program) at Cornell University. Others give college credit for union-run programs--Antioch College, for example, gives credit for courses offered by the AFL-CIO's George Meany Center for Labor Studies in Maryland.

Educational programs can be found at all union levels. District Council 37 of the American Federation of State, County and Municipal Employees runs a local program with Hofstra University (not limited to labor studies). The American Federation of Government Employees and the international Union of Electrical, Radio and Machine Workers both conduct regional programs, and the Communications Workers of America held a national training conference for women in September 1978, attended by 400 women.

The University and College Labor Education Association, endorsed by the AFL-CIO, teaches labor union subjects, utilizing a structure reminiscent of the Agricultural Extension Service. Women within the Association have created a task force, composed of male and female members, on the education of union women.* The UCLEA sponsors three regular summer schools for union women which include discussions of issues and problems (e.g., labor laws, child care, non-traditional jobs) as well as skill workshops to develop assertiveness, confidence, and leadership tactics. Instructors are active union members who are not union officers.

The 1978 summer schools drew the largest number of women to date--the Northeast school taught 115 students, the Midwest school had 130,

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*My thanks to Marge Rachlin of the George Meany Center and Gloria Johnson of the IUE for information on labor studies programs targeted on women.

and the South session enrolled 45 women. The University of Michigan, which runs a similar summer program, had 80 women as students in 1978.

The Trade Union Women's Studies program at the Cornell University School of Industrial and Labor Relations was begun with a grant from the Ford Foundation. An ongoing program, it has been steadily over-subscribed. In its first five years of operation, the program reached more than 500 women (two-thirds of them minorities) from 28 unions through conferences, brief courses, and a one-year program on such topics as writing, speaking, occupational safety and health, grievance procedures, and history of women in the labor movement. This year-long course has proved so successful that AFSCME District Council 37 in New York has implemented a similar program for its members, and other U.S. and foreign institutions are studying Cornell's program for possible replication.[96]

The George Meany Center for Labor Studies is the leading staff training center in the country. Its clientele are the full-time staff of unions affiliated with the AFL-CIO. A staff member at the Center reported that about 40% of the students are women; however, she noted that most women students are concentrated in the courses for flight attendants and in the annual one-week course on women workers. The Center does not keep data on enrollment broken down by course and by sex, but the staff member stated that only a small, though growing, number of women are found in the "nitty-gritty" labor courses, such as those on binding arbitration and specifics of labor law.

Once a year, for six years, the Meany Center has offered a week long course entitled "Women Workers: Issues and Problems." Enrollment in each class is about 30 students, nearly all of whom are women, who are either in staff or appointed positions in their unions. Part of

the course consists of information and discussion of topics similar to those mentioned in the UCLEA summer schools. Other portions focus on leadership skills, consciousness and confidence raising, and action plans to be implemented back home in the respective unions and workplaces.

The AFL-CIO Department of Professional Employees established, by a 1973 resolution, a salaried professional women's committee of representatives from 19 unions that are part of the salaried and professional department (this includes clerical workers). This committee has explored issues in education of women workers and has written a proposal to upgrade 10-12 union women for professional positions over an 18-month period. The proposal, which would also establish a clearinghouse for materials on working women, has so far been unable to draw funding.

The Coalition of Labor Union Women (CLUW), founded in 1974, is comprised of members from 65 international unions. CLUW currently has 30 active chapters nationwide which work locally to achieve the national organization's goals: "to advance the position of women on the job, in the leadership of their unions, and through collective bargaining agreements and legislation to secure educational and family benefits for working women."[97]

While CLUW has delineated the components of an extensive, thorough educational program to combat employment discrimination, its lack of staff has severely hampered national efforts to translate the design into ongoing, replicable programs. (The national office has only one full-time staff person.) The national organization has printed a number of booklets of interest to women workers, including one entitled "All You Need to Know About Women in the Workforce." In addition, many local chapters have run education workshops reflecting major concerns of

working women, such as equal pay for work of equal value, affirmative action, the Equal Rights Amendment, and quality alternative child care. In the fall of 1978, CLUW held a national conference to train members in key issue areas.*

Currently, CLUW and the National Manpower Institute's Center for Women and Work are jointly undertaking a WEAA-funded project to train two CLUW representatives for each of 10 chapters in techniques of needs assessment. These trainees will then carry out local assessments with working women and establish an information and referral center to match needs (including educational needs) to community resources. The project will also produce a handbook for other union chapters who wish to establist this service.

While trade union women are beginning to educate themselves for leadership, they face barriers to their efforts. In their study of union women, Barbara Wertheimer and Anne Nelson write that, beyond the commonly stated reasons for women's underutilization of worker education opportunities, union women face three major handicaps in their efforts toward leadership:

--unexamined assumptions of men toward women's union roles;

--the difficulty women have in envisioning themselves as leaders rather than helpers; and

--deep-seated lack of confidence by women in their own abilities.[98]

As in most educational services to workers, women are underrepresented in labor studies offerings not targeted specifically on them, but their numbers are growing and so is the number of female-oriented courses. As Sonyia Leggett, a graduate of the Trade Union Women's Studies program, declared, "It's going to take a hell of a lot of education of women to

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*I am grateful to Naomi Baden, CLUW's lone full-time national staff person, for information on CLUW's educational activities.

convince them they can handle it and aren't afraid to go ahead and try to get what they're entitled to--representation."[99]

IV. CONCLUSIONS AND RECOMMENDATIONS

Education has long occupied a strong position in the value structure of American society, being viewed as the basic stepping-stone to equal opportunity in most spheres of life. It is our collective belief that schooling should provide competencies required for work, leisure, human relationships, and good economic, political, and community citizenship. Education enhances individual options, and individual freedom of choice is the cornerstone of the American dream.

Of all the objectives of education, though, the one to which we attach the most importance is occupational readiness, or the capacity for economic success. Parents seek quality education for their children so that they may "grow up and be somebody"--somebody with money and status. Furthermore, data in the preceding sections strongly suggest that it hardly makes sense to talk about "worker education" without considering the employment opportunities which might be affected by additional education. Working adults who pursue educational goals do so, as has been shown, primarily out of the belief that further education will help them enhance their income and job status. There is no sex difference here; working men and women share this desire equally.

Indisputably, however, money and prestige are not equally available to all who strive for them. Indeed, the social and occupational pyramid resulting from our economic system is oft-cited evidence that the viability of the aforementioned American dream depends in part on its denial to a significant portion of the population. Education has

historically been perceived as a route to economic enhancement, and access to education has historically been differentially available. Schooling was initially accessible only to white, landed males. Now, most formal barriers to women's and minorities' participation have been legislatively removed, but more subtle factors limit their educational and occupational opportunities.

These factors can be illustrated, if not pinpointed, by comparing the distance between a given educational program and its economic consequences to the proportion of women in the program. In traditional high school offerings, which alone don't usually equip a graduate to acquire any of the more desirable jobs, the major division between the sexes is home economics and clerical courses for women versus industrial and trade ("shop") courses for men--a matter of one or two courses out of an entire curriculum. In colleges and vocational schools, where students begin to choose more specific, specialized categories of occupation--categories offering greater prestige and/or renumeration than those generally available to high school graduates--the difference is more widespread and pronounced. While the number of women in some traditionally male-dominated courses of college study has increased in the past 20 years, the differential in earned degree fields between men and women remains substantial. In undergraduate and graduate college education, as in the workplace, women are largely channeled into lower-paying, female-intensive fields with lesser opportunities for advancement. Secondary and post-secondary vocational education, which prepares students for more specific occupations than most college programs, has demonstrated even less amenability to opening its non-clerical, non-homemaking offerings freely to women. Apprenticeship programs, which often lead directly to specific,

well-paying jobs, show the smallest proportion of women enrolled of any of these programs.

It would appear, then, that the higher up a given learning program stands on the chain linking education to jobs offering high potential for money, status, and/or advancement, the less accessible is the program to women. A variety of winnowing processes, based on factors other than performance-related qualifications, work primarily to the advantage of white males. Women, to an even greater extent than black and hispanic men, are short-changed in the process.

But all of the above-mentioned programs gneerally serve a population under 25 years of age who identify themselves primarily as students or trainees and hold jobs for the main purpose of supporting their student status. Most of them do not serve the large group whose access to education is most severely restricted: prime-age workers. Our educational system gives little consideration to the needs of those who have not followed a lock-step, one-way progression from school to workplace. Certainly, institutional offerings are open to workers--if they can fit them in during non-work hours, pay for them, and work out the necessary family adjustments.

Clearly, education is a more complicated undertaking for a full-time, middle-class worker with home and family responsibilities than it is for a traditional student who can devote more of her/his financial and personal resources to its pursuit. While this fact could be viewed simply as a consequence of the life choices one makes, that view obscures the equally valid observation that barriers to further education don't flow logically or inherently from attachment to the workforce; rather, we have erected those barriers. Working women's ready access to education and training

requires adjustments in the workplace and the family--short term investments of time and money--that both have generally been reluctant to make. Women are underrepresented in most programs of worker education and training to a degree equal to or greater than their scarcity in traditional pre-entry training programs in the sciences, engineering, and crafts.

Why? While specific barriers have been noted and will shortly be addressed in the recommendations, it is appropriate to note here one critical aspect of worker education. While traditional students are preparing to enter the job market, workers seek further education and training in order to advance in it. Most are aiming at very concrete targets: specific upgradings or promotions and increments of additional income. Thus, more directly than pre-entry students, worker-students want education for the clear purposes of better work and better pay. If social and economic factors work to exclude many women from pre-entry preparation for more desirable jobs, it might well be expected that those same forces operate more immediately to obstruct the advancement of working women. This observation is supported by Abramovitz's finding that a greater proportion of female than male workers report that courses they did take did not net them the expected promotion, upgrading, or wage increase that originally motivated them to enroll. But the fact that a significant number of male workers report the same disappointment in education's fruits indicates that the factors underlying this phenomenon go beyond sheer sex discrimination at this point. Indeed, Abramovitz concluded that a worker's investment in, and payoff from, additional education is more directly correlated with her/his occupation and status in the workplace hierarchy than with gender. A greater proportion of

women than of men are in low-status, low-paying occupations, and this explains more thoroughly what at first glance appears to be purely a sex difference. It is hardly necessary to posit a post-entry intensification of barriers to high-status jobs; holding a low-status job represents the culmination of all the pre-entry barriers. The social and economic forces that initially directed women (and men) into less desirable jobs also function quietly to keep them there. Thus, the difference is not one of sex; it is a class phenomenon.

While it would be easy to blame "society" or "men" for sex discrimination in education, training, and the workplace, such a response is simplistic and holds no heuristic value for women. For reasons not only of deliberate discrimination, but also of ignorance, fear, benign neglect, and fast-paced social and economic change, women are not getting the message about what they can realistically expect for their employment future. The director of the Sex Desegregation Institute at Rutgers University recently queried a roomful of vocational education administrators informally as to how many years the average woman would spend in the paid workforce. The responses centered in the 2-5 year range.[100] Yet readily available statistics indicate that American women spend an average of over 24 years in the workforce. Supporting this anecdotal observation with hard data is the National Longitudinal Survey of Women in 1968. In this study, 28.5% of white females age 14-24, and 59.3% of black females in that age group, expected to be working at age thirty-five. At that same time, 47.7% of white women and 66.5% of black women age 30-44 were actually working.[101]

This disturbing disparity between perception and reality indicates either serious misinformation or deep denial of the facts. Either way,

the implications are devastating, for if a woman believes her workspan to be only a few years, her investment in occupational preparation (i.e., education and training) will be, has been, correspondingly small. Women have been led to believe that occupational readiness is a short-term investment. To the extent that a non-career-oriented woman is willing to believe that she will become and remain married to a man whose income will continuously be sufficient to support her and their children, she is less likely to take steps to insure that she can provide herself, and possibly her children, with adequate economic support.

Education and training for working women take on added importance because an increasing number of women are finding out, late in the game, that the above conditions simply do not apply to them. In addition to the greater number of women who choose employment as a major life emphasis, economic need is pushing more and more women into the workplace. Whatever women's reasons for working are, the fact remains that worker education and training could serve a critical need of women who did not understand early that working and earning might play a greater role in their lives than they had anticipated.

The data break down sex stereotypes and document this need. The number and percent of working women have increased dramatically and will continue to rise. Neither marriage nor childrearing is removing women from the workforce for long periods of time anymore. The average woman works at least a quarter of a century, and most women do so out of financial necessity. Yet their education prepares them for low-paying, low-status jobs with little advancement potential. Demographic trends point to women's greater participation in the workforce, while economic trends suggest that it is the lower-paying jobs whose expansion will more

readily accommodate larger numbers of women. A sizable number of women are currently in job transition--many because they need, not simply want, more money. Some seek education to facilitate the change, but most of these women are still striving for limited gains rather than long-term potential.

Most existing education and training programs are open to women--that is, there are no formal barriers. But many of them discriminate against women, through such means as subtle and overt sex stereotyping, differential allocation of program monies between the sexes, separate eligibility standards, non-performance-related admissions criteria, and even harrassment. From traditional education to government-sponsored training, women experience less favorable program outcomes than men. Occupational segregation remains the rule, and, even within the same jobs, women are paid less than men.

Working women also confront barriers to education and training that aren't based solely on institutional sex discrimination. Money is a major obstacle--even if tuition is reimbursed, advance payment is a problem for many. Fear of returning to school and uncertainty of educational goals prevent women from moving assertively in their own behalf. Child care of acceptable quality and cost is often hard to locate, and home-making responsibilities eat into the time and energy required for new learning.

Finally, there are workplace factors that help reduce the ranks of potential women students. Lack of publicity about company educational benefits keeps more women than men from participating in them. Employers as well as educators hold sex biases concerning occupations and jobs, lending credence to many workers' belief that education won't help them

on the job. While women appear to be optimistic about the role of education in their advancement opportunities, few women surveyed have actually gained job-related rewards from additional study or training. Few employers offer release time, much less paid release time, for classroom pursuits, and work schedules prohibit some women from availing themselves of educational opportunities.

How, then, might working women's need for education and training be met? Given the variety of obstacles and their sources as listed above, it appears that a number of changes must occur if women are to have equal opportunity to men in education and the workplace. Since educational opportunity for working women is linked to family, leisure, workplace, and institutional factors, these have all been espoused in the recommendations below. The first five of these suggestions are directed collectively to employers, educators, and government bodies, while the remainder are focused on each of these groups individually.

General Recommendations

1. Expand and improve collection and reporting of data on working women and their participation in education and training.

There are significant gaps in data available on participation, program outcomes, barriers to participation, and existing education/training opportunities, for both sexes but particularly for women, that leave program analysts and policymakers inadequately informed on these issues. For example, in-house company training was not discussed in the second section of this paper because company data are both scarce and conflicting. There is currently no way confidently to estimate women's participation in in-house training programs.

Frequently, relevant data are reported by sex, by race, by age, etc., but are not broken down by sex and race, or sex and age, simultaneously. Too often, the tables do not even show breakdown by sex. Important questions are sometimes neglected--for example, the NCES data on adult education lists reasons for participation and for course drops, but not for total nonparticipation.

Successful program and policy decisions require accurate and complete data. Researchers, evaluators, record-keepers, and statisticians, both private sector and government, need to work with potential and actual decision-makers to determine jointly what questions must be asked of the program or population, then ensure that data collection and reporting encompass these points of interest.

2. Target certain programs specifically on women.

Educational and training efforts directly exclusively at women have demonstrated a greater sensitivity to women's needs, goals, and particular obstacles than coeducational programs, particularly when the desired program outcome is a non-traditional job. The all-women programs generally result in higher wages and status for their graduates than the earnings obtained by women in coeducational programs. Not only does such targeting benefit the woman trainee, but evidence indicates that per client costs are lower in the all-female programs.

Until women are more equitably represented in the higher-wage, higher-status jobs, it is probable that most programs that train people specifically for those jobs will be of greater benefit to women if a portion of program monies is targeted solely on women. In programs serving both sexes, occupational stereotypes are frequently perpetuated.

Women are channeled into the lower-paying jobs, and they may receive less than their proportional share of program resources. The all-female programs not only help remedy the above inequities, but also are more likely to explore and maintain liaisons with employers hiring women into non-traditional jobs.

Further, their curriculum includes not only job-specific skills, but job bidding, wage negotiating, assertiveness, and other vital capabilities to counteract socialized reticence and low self-esteem. These workplace skills are as important to women's success on the job as the job skills themselves, and coeducational programs don't have the resources to focus intensively on half or less of their clientele.

3. Link occupational education and training to occupational outlook data.

With the large number of working women in the Abramovitz study reporting no significant effect from further education, one wonders how realistic was their prior assessment of job opportunities. Workers should not have to guess at the market. Information should be readily available to workers and educators concerning expanding markets, educational requirements for specific occupations, ratios of applicants to hires, salary scales, opportunities for advancement, and occupational outlook. This sort of information should be common knowledge for employment counselors, vocational counselors, training staff, and educators.

Government-funded employment and training programs in particular could easily be geared to occupational outlook data, since the Department of Labor oversees both training and data collection. The trainees in such programs should also be made aware of employment possibilities and their likely financial consequences over the long term.

All this highly relevant information is useless if it does not reach women making occupational choices. Dissemination of occupational data should comprise a formal component of career workshops, vocational counseling, employment and training programs, and secondary-level guidance counseling. It is crucial that women be taught to seek this kind of long-term comparative description as they make employment and training decisions.. Accomplishing this requires not only fact dissemination but attitude change as well on the part of working women, the bulk of whom now confine their employment planning to short-range goals.

4. Legitimize informal modes of learning.

Adult women taking classes are more than twice as likely as men to be enrolled in courses offered by a community organization. Many women also engage in volunteer work. In addition, homemakers acquire a variety of skills transferable to paid employment situations.

As a rule, these and other informal learning channels are not recognized by educators or employers, yet the learning is valid. A few institutions are beginning to offer academic credit for "life experiences," and employers in experimental projects have shown some willingness to consider competencies over paper credentials. The Women's Career Project in Boston, after ascertaining from employers the competencies required for given jobs, trained women to match these descriptions and placed them in the jobs. One result of this FIPSE-funded project was an increased awareness of employers concerning just what competencies they looked for in a new hire.

Ruth Ekstrom of the Educational Testing Service has prepared written materials designed to help women, career counselors, and employers translate

informally acquired competencies into job skills. This process requires no new training for the woman--it simply alters traditional perceptions of non-traditional learning.

Because informal learning plays such a large part in women's lives, employers and educational institutions should be encouraged to formally recognize these learning modes and the resulting competencies. Informally acquired talents of many women now lie fallow because they have not been legitimized; neither working women nor their employers can afford such waste.

5. Encourage cooperation among educational institutions, employers, and community agencies in matching education and training to local jobs.

While legislation and general policies are of value in shaping the context of equal opportunity in education and the workplace, specific remedies to inequities occur, in the last analysis, at the community level. The National Council of Negro Women/Pace University project is an example of local cooperation among educators, employers, and community agencies toward enhancing the career options and advancement potential of women. The university attracted adult working women, the women acquired the necessary qualifications to fit into better jobs, and employers gained workers trained to meet the companies' needs.

Such efforts as the NCNW-Pace project, the Work-Education Consortium of the National Manpower Institute, and various work-education councils that have sprung up locally and regionally are vital to the ongoing success of worker education programs. By working to forge and strengthen linkages between education and work, these cooperative ventures sensitize employers, workers, educators, and students to the realities of both worlds.

Given current problems of unemployment, underemployment, employment discrimination, declining college enrollments, and employer complaints about underqualified job applicants, it would be mutually beneficial for corporations, educational institutions, and related community organizations each to contribute monies for local cooperative endeavors of this nature. Granting agencies could continue to provide seed money, relying on the local organizations to pick up costs after initial start-up, until the benefits of such ventures are sufficiently disseminated to inspire local groups to undertake joint action on their own.

Recommendations for Educators

1. Inculcate girls and women with realistic worklife expectations.

Impressing upon women the importance of occupational readiness is a process that must begin long before they enter the workforce. It is hard to accept vocational educators' ignorance of women's average workspan as reported by Dr. Lubetkin anecdotally; if they are misinformed, their women students are also likely to underestimate the length of their worklives. From kindergarten on, women need to be portrayed as jobholders to a far greater extent than is presently true in educational materials--and not only as domestic, nursing, and clerical workers, but across the entire spectrum of occupations. In junior high and high school, courses in home eonomics and family living should approach their subject matter with the assumption that over half of their female students will spend many years in paid jobs out of choice or necessity. Guidance counselors, instead of channeling girls into traditional occupations, should encourage them to consider all aspects of work, including potential earnings, and help them to evaluate nontraditional jobs as well.

While additional emphasis on aspects of work is necessary to educate men and women about equitable expectations for the workplace and the family, the most important reality women must understand is that paid work is likely to constitute a major share of their lifetime activity. The expectation of working a few years before marriage, then "retiring" into the home, has lost its validity for an ever increasing number of women, yet it continues to be perpetuated by teachers, parents, and employers. Only when women grasp the probable extent of their worklives, and the fact that their earnings will be needed to meet basic expenses, can they invest appropriately in occupational preparation.

2. Offer supplemental programs for workers returning to school.

As traditional-age college enrollments decline, colleges are reaching out to working adults in order to fill the rolls and meet their operating costs. Many of these nontraditional students have specific educational goals in mind. Still, they often feel overwhelmed by academia, fearful of their ability to succeed and isolated from other students. Many are in need of educational and career counseling that takes into account the particular problems and assets of worker-students.

A number of institutions have added special counseling components for returning students to their ongoing formal services. While these programs are unquestionably helpful, most take the approach of orienting the older student to academia and fitting educational goals into institutional offerings. Less is done to sensitize faculty and staff to the needs and experiences of working students, to offer special topics for them, or to acquaint them with each other.

Since colleges are recruiting and attracting increasing numbers of older students, it would seem wise to plan this transition rather than coping with significant change on a day-to-day basis. Seminars for faculty, such as those conducted by RCEWP in Philadelphia, would help educators realize both that working students have particular insecurities and that these same students have opinions and information formed by experience rather than textbooks.

Northern Kentucky State University has instituted an innovation called the Peer Support Organization. Targeted at entering or re-entering students over 25, it offers a newsletter, one-to-one peer counseling, and monthly group meetings, all free of charge. Each new member is assigned a volunteer "counselor"--a student who has successfully completed one semester at the university. The newsletter announces workshops and seminars on topics of particular interest to older students, offers child care and tutoring information, and lists recommended readings. The monthly meetings allow discussion of teachers, spouses, families, and other sources of anxiety for the older student. While too new to compare the academic success of members and non-members, it does appear that PSO inhibits the drop-out rate among this group. The admissions director at NKSU pointed out that PSO is based on the premise that "people have the ability to solve their own problems. What they need is support, reinforcement, and the knowledge that somebody is on their side."[102]

These types of "acclimating" efforts need not be expensive, and they can go far to reduce perceived institutional barriers to worker education. Many existing Centers for Returning Students could, with very little additional money and/or staff, conduct meetings, workshops, seminars, and the like for students, their families, and faculty to help sensitize all to the fears, needs, and assets of nontraditional students.

Recommendations for Employers

1. Link education and training to individual advancement opportunities.

The curious paradox of Abramovitz's dual finding--that, while women are more optimistic than men about their advancement opportunities, they are less likely to be promoted after taking classes toward promotion--suggests three possibilities:

(a) Women may not be meeting promotion qualifications through their educational endeavors.

(b) Women may be overestimating the extent of available advancement opportunities.

(c) The employer's stated and actual advancement policies may differ.

These are not, of course, mutually exclusive hypotheses. The finding that far fewer men were advanced than took courses toward that goal, though the disparity was somewhat less pronounced than for women, points to an apparent lack of congruence between employee expectations and actual results that is not largely attributable to sex discrimination. Recall here, too, that the greatest single barrier to non-use of tuition aid plans cited in the Abramovitz study was the belief that no employment-related gains would accrue from further education; also, over 40% of the NMI sample shared this belief. These factors together suggest that company advancement structures are relatively inaccessible to many workers. Failure to pursue further occupational education is not only understandable, but eminently logical, if the chances for the desired payoff are slim.

Those who wish to stimulate greater worker participation in education and training, regardless of the worker's sex, should consider a two-pronged approach to this problem. First, employers should be encouraged to

examine their advancement policies. A greater emphasis on competencies than on paper credentials could benefit management as well as workers. Providing rewards of money and status to employees acquiring further educational qualifications could result in a more competent, motivated company workforce. If companies do not open their promotion/upgrading hierarchies to a greater proportion of workers, there is little reason to expect workers to show more interest in further education and training.

Because this sort of change comes about very slowly and meets with great resistance along the way, a second, simultaneous effort is recommended. Workers should be helped to match their educational pursuits to known advancement opportunities in the company. Just as occupational data should be freely available to those making occupational choices, so should similar information on specific jobs within a company be freely obtainable by employees considering advancement possibilities.

Personnel staff could be made available to discuss past and present trends in the company's hiring and promotion procedures to individual employees. If a worker is unlikely to achieve her/his employment goals within the company, such information may help her/him to redesign goals or look elsewhere. If there are particular credential or training programs favored by the company in promotion considerations, the worker should know about them.

Opening corporate advancement structures, and helping workers fit into those structures, offers benefits to all concerned. Despite its discussion here, this should not be construed as a women's issue--it is simply the case that a greater proportion of women than men are in that group of workers most likely to find their paths to advancement severely restricted or nonexistent.

2. Adapt workplace structures to facilitate worker participation in education and training.

While workers in the Abramovitz and NMI studies cited a variety of types of barriers to use of tuition aid benefits, a number of barriers in each of the four categories--personal, program, work-related, and educational--could be reduced by introducing some flexibility into workplace policies and structures. This might include:

--Advance payment of tuition. Many workers simply can't scrape together the front money for educational expenses. Since the employer has control over the worker's paycheck, it is difficult to foresee a financial loss for the employer from this practice.

--Paid release time for classes. This provision would remove some time pressures from worker-students without substituting a financial disincentive to participation. Further, it would lessen the physical fatigue cited by some workers as an obstacle to continuing their education, and it would eliminate the necessity of traveling during night hours, which a number of women cited as a personal safety barrier. Finally, paid release is a good investment for the employer, since the payoff is likely to be a more qualified, competent, and motivated employee.

--Flexible work schedules. Flex-time and part-time hours, and job-sharing, are other alternatives to ease the time and work schedule barriers named by workers. Evidence indicates that part-time workers are more productive, per unit of time, than full-time employees, so employers should also be interested in part-time and job-sharing. Flex-time usually means a worker is on the job during certain core hours, with variability occuring early or late

in the workday. This would enable workers to fit in a class at one end of the day, again with no loss of pay.

--Payback plans for training programs requiring a short-term pay reduction. Workers who wish to enter certain apprenticeship programs, for example, are faced with a pay cut during the time of training, although over the long run their pay will be higher as a result of training. Certainly this is a significant barrier to entry into the program. Rather than impose the cut, another possibility would be to offer the worker the option of a payback plan, whereby the reduction in pay would be deducted from future wage gains. Thus, the worker would continue at present wage level, and upon completion of training the difference could be spread out over a period of time when s/he is earning a higher wage. While the gain from training would be more slowly realized, the worker need not have her/his income reduced in absolute terms.

Recommendations for Government Bodies

1. Remove disincentives to equal opportunity in government employment and training programs.

Legislation has been passed requiring CETA programs to "contribute to . . . overcoming sex stereotyping," and this is a hopeful sign. However, the Job Corps has had a mandate for 50% female enrollment, but women's representation has never exceeded 33 percent. Thus, the enforcement of these laws must become a primary concern of oversight bodies. Undoubtedly some occupational segregation will persist because women will choose traditional occupations--but CETA programs should make every effort, through classroom training, work experience, and PSE jobs, to expose

female clients to the realities of the job market and information on non-traditional jobs, rather than automatically channeling the majority of women into low-paying fields.

Likewise, welfare regulations that favor male family heads in the WIN program must be revised. The bulk of the AFDC population is female, and such provisions as the Talmadge Amendments ensure that this will remain the case. Women need well-paying jobs just as badly as men do, and income disregard provisions are poor justification for discrimination by sex. Through its selection criteria, WIN ignores most of its services population and engages in goal displacement.

While the Bureau of Apprenticeship and Training is taking concrete steps to increase women's representation in apprenticeships leading to high-wage jobs, the Division of National Programs appears to be almost ignoring women, both in its contracts and in the outcomes of contract programs. The DNP budget is made up of public dollars, and women have a right to demand better service from DNP contractors. Division administrators are in a position to enforce equal opportunity standards in DNP programs and to target a greater portion of agency resources on women.

2. Increase the federal role in alternative child care provision.

Nearly half of all minor children in this country have mothers in the workforce. Half of them also have a working father--the rest, an unemployed or absent father. The number of licensed day care slots falls overwhelmingly short of the number of children needing alternative care.

Working parents need access to reliable, affordable alternative child care arrangements of good quality. This need extends beyond working hours for workers wishing to continue their education. While child care is a

parent's concern, regardless of gender, it is nearly always women who find the lack of alternative care to be a barrier to work and educational pursuits.

While the economic reality of large numbers of two-earner and single-parent families will most likely force the issue in the future, past efforts to pass comprehensive child care legislation have been blocked. The most recent attempt did not survive its Senate subcommittee, largely due to disagreement among potential supporters and lack of Administration support.

Corporations and labor unions have made a few efforts to provide day care for their workers' children. While commendable, the services available generally cover only working hours, leaving the would-be student worker to find other arrangements during class time.

The operational realization that work and its educational correlates are necessary for women, including mothers, is long overdue at all levels. The federal government should take the lead in a well-planned, comprehensive system of alternative child care that facilitates participation in work, education, and training. This kind of action would go a long way to revise the deeply ingrained attitude that women are secondary workers whose family considerations must always supersede work demands, and it would thus erode a long-standing barrier to equal workplace opportunity.

3. Make Basic Educational Opportunity Grants available to part-time students.

Currently BEOGs are available only to students who carry a full-time schedule of classes. Of course, many of these students work part-time to supplement their grants. Few full-time workers, however, are in a position

to cut back to part-time in order to go to school full-time. Particularly for working women with children, full-time study is virtually impossible.

However, the financial need still exists for these women. In order to make college coursework more accessible to workers, the federal government should open BEOGs to part-time students on the same extent-of-need basis as is used for full-time students.

4. Revise the appropriations structure of the Women's Educational Equity Act.

Currently the WEEA requires a level of funding in Tier I, the models-development section, which has not even been approximated in the past in order to trigger funds for Tier II, the models-implementation portion. This structure seems undesirable for two reasons: first, given historical appropriations and current fiscal cutbacks, money for Tier II is not likely to be triggered under current provisions in the near future. Secondly, the logic of such a high trigger level is questionable. The Women's Educational Equity Action Program has developed some excellent, generalizable program models on a budget of half the mandated trigger level. While further development is necessary, it is important to encourage dissemination and implementation of these efforts.

Thus, while the two-tier design is useful in ensuring continued development, the present trigger level may mean that creation continues at the expense of application. The Tier II trigger should be revised downward to match realistic expectations for Tier I appropriations.

5. Provide government support for independent information and counseling centers.

A key need of working women considering education and training is complete and accurate information on learning resources, along with guidance in educational and occupational goals. Most universities and colleges offer such services in connection with their own course offerings, but they frequently don't include non-university programs. Independent resource centers encompass a broad range of programs available in a given community, including university courses. The RCEWP in Philadelphia is such a center, and while its services are open to everyone, administrators found that 70% of RCEWP clients are women.

Independent centers, because they cover a greater variety of learning programs, are able to serve as "brokers" for potential students, and they meet a need that university centers don't address completely. However, many of these independent centers operate on shoestring budgets and must go through the annual anxieties of the refunding process at the end of their grant periods. Tax-based support for the independent centers, whether it be local, state, or federal dollars, would help to assure their continuance, thereby assisting workers in determining and meeting their educational needs.

6. Continue the Fund for Improvement of Postsecondary Education.

By working with employers, educators, labor unions, occupational counselors, and diverse populations of women, FIPSE has helped to generate a large number of effective models for aiding women in their educational and work pursuits. The Fund's projects are exemplary in their demonstration of the many options for approaching working women's

educational needs, and on a relatively small budget. The dissemination of these models is most important and should be considered along with developmental requirements in fiscal appropriations.

7. Commission an agency to foster dialogue among working women and resource persons at the community level.

A general rule of change is that it is most readily effected by the organization of those who stand to benefit most from it. Women have organized within labor unions, and a number of clerical workers' groups, such as Nine to Five in Boston and Sixty Words Per Minute in Washington, have sprung up in major cities. The National Commission on Working Women has conducted six regional dialogues across the country, bringing together women in the 80% (who hold low-paying, low-status jobs) along with a variety of resource persons, for purposes of discovery, consensual validation, and planning for local action. These meetings have been a tremendous success, spurring requests for assistance from other groups wishing to hold such dialogues but who are without funds. Willard Wirtz, in advocating these community-level meetings, estimated that 500 such conclaves could be held over three years with approximately $10 million seed money.[103] In this way, the voices of working women could be heard directly.

A central agency would function to dispense funds, provide technical assistance, collect and disseminate results of the meetings, and synthesize their implications for a variety of policy initiatives, including those in education and training.

Activating the very women who need further education and training is the most important single step in assuring that the need is addressed. The

involvement of both government and private sector groups is required for this kind of grassroots communication. Congress should take the lead in this process and provide a mechanism whereby working women can, collectively and locally, articulate their perceptions and plan for change.

The unequal status of women in education, training, and the workplace--in American society--is not going to change overnight. One may argue the benefits and injustices resulting from a double standard, but treating women differently is deeply ingrained in our philosophies and behaviors. The premises on which lesser opportunities for women in education and workplace are based, however, have largely lost their demographic validity.

These recommendations for change are not written in stone, nor are they exhaustive. Means for equalizing and enhancing women's educational and occupational options are as many and varied as the individuals who put their minds and talents to the task--in fact, several of the above suggestions involve precisely this kind of collaboration. Thus, the conclusion of this paper is not an ending, but an invitation--to working women, employers, trade unions, educators, counselors, government officials, and others in the multitude of persons directly concerned with equal opportunity--to apply their energies and skills to the creation of individual and collective approaches both to educating women for the lives they will lead and to enriching the scope and potential of those lives.

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FOOTNOTES

[1]Women and Poverty, U.S. Commission on Civil Rights, 1974.

[2]Education and Work Group, Occupational Segregation: Policy Options (National Institute of Education, 1976).

[3]American Women Workers in a Full Employment Economy, Hearing before the Subcommittee on Economic Growth and Stabilization of the Joint Economic Committee of the Congress, Sept. 16, 1977, p. 2.

[4]"An Overview of Women Workers," National Commission on Working Women, 1978.

[5]Education and Work Group, Occupational Segregation: Policy Options (National Institute of Education, 1976).

[6]Social Indicators of Equality for Women and Minorities (U.S. Commission on Civil Rights, August 1978), Figure 4.3, p. 57.

[7]Ibid., Table 4.4, p. 58.

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